1   2   3   4   5   6   7   8   9   10	David A. Bricklin, WSBA No. 7583 Zachary K. Griefen, WSBA No. 48608 Bricklin & Newman, LLP 123 NW 36th Street, Suite 205 Seattle, WA 98107 (206) 264-8600 bricklin@bnd-law.com griefen@bnd-law.com  Patrick Lanciotti, Esq. (PHV Forthcoming) 360 Lexington Avenue, 11th Fl. New York, New York 10017 (212) 397-1000 planciotti@napolilaw.com	
11	Attorneys for Plaintiffs	
12	7 Amorneys for Framiditis	
13		
	IN THE UNITED STATES I FOR THE EASTERN DISTRIC	
14	TORTILE ENGILIATED THE	or or whomicore
15	NICOLE ACOSTA, individually and as	
16	parent and natural guardian of M.A., minor child; GABRIEL ACOSTA; GABRIEL	NO.
17	ACOSTA, Jr.; MARILENA ACOSTA;	110.
18	CLAUDIO ACOSTA; ALICYA	
19	ALTAMIRANO, individually and as	CLASS ACTION
	parent and natural guardian of S.G. and J.G., minor children; ANTHONY	COMPLAINT WITH INDIVIDUAL CLAIMS AND
20	ALTAMIRANO; KYLE AMES,	DEMAND FOR JURY TRIAL
21	individually and as parent and natural	CLASS ACTION
22	guardian of M.A., O.A., and P.A.; TORIN	CERTIFICATION PENDING
23	ANTIJUNTI; VICTORIA ANTIJUNTI; RONALD BOSTER; PAMELA BOSTER;	
24	DEBBY BROWN; DOUG SIMPSON;	
	RICHARD HAYES; MARY HAYES;	
25	BRAD HYATT; BRANDI HYATT;	
26	JENNIFER MCINNIS; DARIK ROCHON; TASHA MCLEMORE; WILL	
	ROCHON, TASHA WICLEMORE, WILL	

1	MCLEMORE; MARK MEYOCKS;
2	RENEE MEYOCKS; CODY MEYOCKS;
3	MADISON MEYOCKS, LANCE
	OSTROM; CHARLENE OSTROM;
4	JAMIE PARKER; LANDON PARKER; GERALD RAFN; JILL RAFN; JESSICA
5	RICHARDS, individually and as parent
6	and next friend of G.B. and K.F., minor
7	children; SONIA SERRANO, individually
	and as parent and next friend of E.V.,
8	minor child; JOSE VARGAS; JUAN VARGAS; TROY SLOBIG; CORY
9	SLOBIG; ROBERT SMOOT; CARRIE
10	VALENCIA; AUDOMARO VALENCIA;
11	EVELYN VANDENHEUVEL;
	RICHARD VANDENHEUVEL;
12	MATTHEW VOGEL; JENNA VOGEL; JUSTIN WERST, individually and on
13	behalf of all others similarly situated,
14	ocitair or air outers similarly situated,
15	Plaintiffs,
15	
15 16	Plaintiffs,
	-vs -
16	
16 17 18	-vs - THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC
16 17 18 19	-vs -  THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC.,
16 17 18	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA
16 17 18 19	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ARCHROMA U.S. INC.,
16 17 18 19 20	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA
16 17 18 19 20 21 22	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ARCHROMA U.S. INC., BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN
16 17 18 19 20 21 22 23	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ARCHROMA U.S. INC., BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS INC., CHEMGUARD INC.
16 17 18 19 20 21 22	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ARCHROMA U.S. INC., BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS INC., CHEMGUARD INC. CHEMICALS, INC., CLARIANT
16 17 18 19 20 21 22 23	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ARCHROMA U.S. INC., BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS INC., CHEMGUARD INC. CHEMICALS, INC., CLARIANT CORPORATION, individually and as
16 17 18 19 20 21 22 23 24	THE 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC, INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX CORPORATION, ARKEMA INC., ARCHROMA U.S. INC., BUCKEYE FIRE EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION, CHEMDESIGN PRODUCTS INC., CHEMGUARD INC. CHEMICALS, INC., CLARIANT

1	DuPont Chemical Solutions Enterprise,
2	DEEPWATER CHEMICALS, INC.,
3	DUPONT DE NEMOURS INC.,
3	individually and as successor in interest to
4	DuPont Chemical Solutions Enterprise,
_	DYNAX CORPORATION, E. I. DUPONT
5	DE NEMOURS AND COMPANY,
6	individually and as successor in interest to
	DuPont Chemical Solutions Enterprise,
7	KIDDE-FENWAL, INC., individually and
8	as successor in interest to Kidde Fire
	Fighting, Inc., NATION FORD
9	CHEMICAL COMPANY, THE
10	CHEMOURS COMPANY, individually
	and as successor in interest to DuPont
11	Chemical Solutions Enterprise, THE
12	CHEMOURS COMPANY FC, LLC,
13	individually and as successor in interest to
	DuPont Chemical Solutions Enterprise, and
14	TYCO FIRE PRODUCTS, LP,
	individually and as successor in interest to
15	The Ansul Company,
16	
-	Defendants.

17

18

19

20

21

22

23

24

25

26

## I. CLASS ACTION COMPLAINT AND DEMAND FOR JURY TRIAL

Plaintiffs NICOLE ACOSTA, individually and as parent and natural guardian of M.A., minor child; GABRIEL ACOSTA; GABRIEL ACOSTA, Jr.; MARILENA ACOSTA; CLAUDIO ACOSTA; ALICYA ALTAMIRANO, individually and as parent and natural guardian of S.G. and J.G., minor children; ANTHONY ALTAMIRANO; KYLE AMES, individually and as parent and natural guardian of M.A., O.A., and P.A.; TORIN ANTIJUNTI; VICTORIA ANTIJUNTI; RONALD

BOSTER; PAMELA BOSTER; DEBBY BROWN; DOUG SIMPSON; RICHARD
HAYES; MARY HAYES; BRAD HYATT; BRANDI HYATT; JENNIFER
MCINNIS; DARIK ROCHON; TASHA MCLEMORE; WILL MCLEMORE; MARK
MEYOCKS; RENEE MEYOCKS; CODY MEYOCKS; MADISON MEYOCKS,
LANCE OSTROM; CHARLENE OSTROM; JAMIE PARKER; LANDON
PARKER; GERALD RAFN; JILL RAFN; JESSICA RICHARDS, individually and as
parent and next friend of G.B. and K.F., minor children; SONIA SERRANO,
individually and as parent and next friend of E.V., minor child; JOSE VARGAS; JUAN
VARGAS; TROY SLOBIG; CORY SLOBIG; ROBERT SMOOT; CARRIE
VALENCIA; AUDOMARO VALENCIA; EVELYN VANDENHEUVEL;
RICHARD VANDENHEUVEL; MATTHEW VOGEL; JENNA VOGEL; JUSTIN
WERST, ("Plaintiffs"), by and through their undersigned counsel, hereby file this Class
Action Complaint, individually, and on behalf of all others similarly situated, against
Defendants, 3M COMPANY, f/k/a Minnesota Mining and Manufacturing Co., AGC,
INC., f/k/a Asahi Glass Co., AGC CHEMICALS AMERICAS INC., AMEREX
CORPORATION, ARKEMA INC., ARCHROMA U.S INC., BUCKEYE FIRE
EQUIPMENT COMPANY, CARRIER GLOBAL CORPORATION,
CHEMDESIGN PRODUCTS INC., CHEMGUARD INC., CHEMICALS, INC.,
CLARIANT CORPORATION, CORTEVA, INC., DEEPWATER CHEMICALS,
INC., DUPONT DE NEMOURS INC., DYNAX CORPORATION, E. I. DUPONT

DE NEMOURS AND COMPANY, KIDDE-FENWAL, INC., NATION FORD CHEMICAL COMPANY, THE CHEMOURS COMPANY, THE CHEMOURS COMPANY FC, LLC, and TYCO FIRE PRODUCTS, LP, ("Defendants") and allege, upon information and belief, as follows:

## II. INTRODUCTION

- 1. This action arises from the foreseeable contamination of groundwater by the use of aqueous film-forming foam ("AFFF") products that contained per- and polyfluoroalkyl substances ("PFAS"), including perfluorooctane sulfonate ("PFOS") and perfluorooctanoic acid ("PFOA").
- 2. PFOS and PFOA are fluorosurfactants that repel oil, grease, and water. PFOS, PFOA, and/or their chemical precursors, are or were components of AFFF products, which are firefighting suppressant agents used in training and firefighting activities for fighting Class B fires. Class B fires include fires involving hydrocarbon fuels such as petroleum or other flammable liquids.
- 3. PFOS and PFOA are mobile, persist indefinitely in the environment, bioaccumulate in individual organisms and humans, and biomagnify up the food chain. PFOS and PFOA are also associated with multiple and significant adverse health effects in humans, including but not limited to kidney cancer, testicular cancer, high cholesterol, thyroid disease, ulcerative colitis, and pregnancy-induced hypertension.

- 4. At various times from the 1960s through today, Defendants designed, manufactured, marketed, distributed, and/or sold AFFF products containing PFOS, PFOA, and/or their chemical precursors, and/or designed, manufactured, marketed, distributed, and/or sold the fluorosurfactants and/or perfluorinated chemicals ("PFCs") contained in AFFF (collectively, "AFFF/Component Products").
- 5. Defendants designed, manufactured, marketed, distributed, and/or sold AFFF/Component Products with the knowledge that these toxic compounds would be released into the environment during fire protection, training, and response activities, even when used as directed and intended by Defendants.
- 6. Since its creation in the 1960s, AFFF designed, manufactured, marketed, distributed, and/or sold by Defendants, and/or that contained fluorosurfactants and/or PFCs designed, manufactured, marketed, distributed, and/or sold by Defendants, used as directed and intended by Defendants, and subsequently released into the environment during fire protection, training, and response activities, resulting in widespread PFAS contamination.
- 7. Since its creation in the 1960s, AFFF designed, manufactured, marketed, distributed, and/or sold by Defendants, and/or that contained fluorosurfactants and/or PFCs designed, manufactured, marketed, distributed, and/or sold by Defendants, was sold to the U.S. Army for its use at the Yakima Training Center ("YTC"), Washington,

Members, the vast majority of whom reside in this District.

34

## IV. PARTIES

Plaintiff Nicole Acosta is a resident of Yakima, Washington, who

the Eastern District of Washington and caused harm to Plaintiffs and the Class

5

## A. Plaintiffs and Class Representatives

67

8

9

14.

currently resides at 318 Schlagel Road. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS,

10

11

accumulation in the pipes, faucets, showerheads, and appliances, as well as through

have entered the water, property, and soil, including but not limited to through the

1213

watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through

1415

Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her

16

exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with

1718

Thyroid Disease. Plaintiff is also at an increased risk of developing several health

19

conditions, including but not limited to effects on the liver and immune system, high

20

cholesterol levels, changes in thyroid hormone, and kidney cancer.

2122

15.

resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff

Plaintiff M.A. is the minor child of Plaintiff Nicole Acosta. Plaintiff is a

23

resides at the property, which currently receives water from a private well. PFCs,

2425

including but not limited to PFOA and PFOS, have entered the water, property, and

26

soil, including but not limited to through the accumulation in the pipes, faucets,

showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff is at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 16. Plaintiff Gabriel Acosta is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with high cholesterol. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.
- 17. Plaintiff Gabriel Acosta, Jr. is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS,

have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff is at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

18. Plaintiff Marilena Acosta is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

19. Plaintiff Claudio Acosta is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff is at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

20. Plaintiff Alicya Altamirano is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff is at an increased risk of developing several health conditions, including but not limited to effects on the liver

and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

21. Plaintiff S.G. is the minor child of Plaintiff Alicya Altamirano. Plaintiff is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

22. Plaintiff J.G. is the minor child of Plaintiff Alicya Altamirano. Plaintiff is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health

conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

23. Plaintiff Anthony Altamirano is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with liver problems. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

24. Plaintiff Kyle Ames is a former resident of Yakima, Washington, who currently resides in Grand Junction, CO. Plaintiff formerly resided at 330 Perry Way, Yakima, WA, and owned the property, which received water from a private well. PFCs, including but not limited to PFOA and PFOS, entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation

of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

- 25. Plaintiff Megan Ames is a former resident of Yakima, Washington, who currently resides in Grand Junction, CO. Plaintiff formerly resided at 330 Perry Way, Yakima, WA, and owned the property, which received water from a private well. PFCs, including but not limited to PFOA and PFOS, entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 26. Plaintiff M.A. is the minor child of Plaintiff Kyle Ames. Plaintiff is a former resident of Yakima, Washington, who currently resides in Grand Junction, CO. Plaintiff formerly resided at 330 Perry Way, Yakima, WA, and owned the property, which received water from a private well. PFCs, including but not limited to PFOA and PFOS, entered the water, property, and soil, including but not limited to through the

accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

27. Plaintiff O.A. is the minor child of Plaintiff Kyle Ames. Plaintiff is a former resident of Yakima, Washington, who currently resides in Grand Junction, CO. Plaintiff formerly resided at 330 Perry Way, Yakima, WA, and owned the property, which received water from a private well. PFCs, including but not limited to PFOA and PFOS, entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

28. Plaintiff P.A. is the minor child of Plaintiff Kyle Ames. Plaintiff is a former resident of Yakima, Washington, who currently resides in Grand Junction, CO. Plaintiff formerly resided at 330 Perry Way, Yakima, WA, and owned the property,

which received water from a private well. PFCs, including but not limited to PFOA and PFOS, entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 29. Plaintiff Torin Antijunti is a resident of Yakima, Washington, who currently resides at 130 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 30. Plaintiff Victoria Antijunti is a resident of Yakima, Washington, who currently resides at 130 Perry Way. Plaintiff resides at the property, which currently

receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with brain lesions and thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

31. Plaintiff Ronald Boster is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with diabetes and kidney damage. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system,

high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

- 32. Plaintiff Pamela Boster is a resident of Yakima, Washington, who currently resides at 318 Schlagel Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with kidney disease and thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 33. Plaintiff Debby Brown is a resident of Yakima, Washington, who currently resides at 136 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an

increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 34. Plaintiff Doug Simpson is a resident of Yakima, Washington, who currently resides at 136 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.
- 35. Plaintiff Richard Hayes is a resident of Yakima, Washington, who currently resides at 230 Leininger Drive. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is at an

increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

36. Plaintiff Mary Hayes is a resident of Yakima, Washington, who currently resides at 230 Leininger Drive. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

37. Plaintiff Brad Hyatt is a resident of Yakima, Washington, who currently resides at 331 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has

a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

38. Plaintiff Brandi Hyatt is a resident of Yakima, Washington, who currently receives at 331 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

39. Plaintiff Jennifer McInnis is a resident of Yakima, Washington, who currently resides at 140 Paint Horse Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as

through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with diabetes and high cholesterol. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 40. Plaintiff Darik Rochon is a resident of Yakima, Washington, who currently resides at 140 Paint Horse Road. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.
- 41. Plaintiff Tasha Mclemore is a resident of Yakima, Washington, who currently resides at 181 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the

accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 42. Plaintiff Will Mclemore is a resident of Yakima, Washington, who currently resides at 181 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 43. Plaintiff Mark Meyocks is a resident of Yakima, Washington, who currently resides at 140 Leininger Drive. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to

through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

- 44. Plaintiff Renee Meyocks is a resident of Yakima, Washington, who currently resides at 140 Leininger Drive. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 45. Plaintiff Cody Meyocks is a resident of Yakima, Washington, who currently resides at 140 Leininger Drive. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to

through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

- 46. Plaintiff Madison Meyocks is a resident of Yakima, Washington, who currently resides at 140 Leininger Drive. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 47. Plaintiff Lance Ostrom is a resident of Yakima, Washington, who currently resides at 191 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the

accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with prostate cancer. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

48. Plaintiff Charlene Ostrom is a resident of Yakima, Washington, who currently resides at 191 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. As a result of her exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with high cholesterol and thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

49. Plaintiff Jamie Parker is a resident of Yakima, Washington, who currently resides at 290 Perry Way. Plaintiff owns the property, which currently receives water

from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 50. Plaintiff Landon Parker is a resident of Yakima, Washington, who currently resides at 290 Perry Way. Plaintiff obtains water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 51. Plaintiff Gerald T. Rafn is a resident of Yakima, Washington, who currently resides at 1922 E Selah Road. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS,

have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

- 52. Plaintiff Jill Rafn is a resident of Yakima, Washington, who currently receives at 1922 E Selah Road. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.
- 53. Plaintiff Jessica Richards is a resident of Yakima, Washington, who currently resides at 13916 McAueley Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA

and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

54. Plaintiff G.B. is the minor child of Plaintiff Jessica Richards. Plaintiff a resident of Yakima, Washington, who currently resides at 13916 McAueley Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

55. Plaintiff K.F. is the minor child of Plaintiff Jessica Richards. Plaintiff a resident of Yakima, Washington, who currently resides at 13916 McAueley Road. Plaintiff resides at the property, which currently receives water from a private well.

PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

56. Plaintiff Sonia Serrano is a resident of Yakima, Washington, who currently resides at 260 Perry Way. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

57. Plaintiff E.V. is a resident of Yakima, Washington, who currently resides at 260 Perry Way. Plaintiff is the minor child of Plaintiff Sonia Serrano. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but

not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

58. Plaintiff Jose Vargas is a resident of Yakima, Washington, who currently receives at 260 Perry Way. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

59. Plaintiff Juan Vargas is a resident of Yakima, Washington, who currently resides at 260 Perry Way. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have

entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

- 60. Plaintiff Troy Slobig is a resident of Yakima, Washington, who currently receives at 230 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.
- 61. Plaintiff Cory Slobig is a resident of Yakima, Washington, who currently resides at 230 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered

the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with thyroid disease. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

62. Plaintiff Robert Smoot is a resident of Yakima, Washington, who currently resides at 440 Firing Center Road. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. As a result of his exposure to PFCs in the contaminated water supply, Plaintiff has been diagnosed with colon cancer. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

63. Plaintiff Carrie Valencia is a resident of Yakima, Washington, who currently resides at 382 Pomona Heights Road. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

64. Plaintiff Audomaro Valencia is a resident of Yakima, Washington, who currently resides at 382 Pomona Heights Rd. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

65. Plaintiff Evelyn Vandenheuvel is a resident of Yakima, Washington, who currently resides at 5504 W Whitman Street. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

66. Plaintiff Richard Vandenheuvel is a resident of Yakima, Washington, who currently resides at 5504 W Whitman St. Plaintiff resides at the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

67. Plaintiff Matthew Vogel is a resident of Yakima, Washington, who currently resides at 241 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, testicular cancer, and kidney cancer.

68. Plaintiff Jenna Vogel is a resident of Yakima, Washington, who currently receives at 241 Perry Way. Plaintiff owns the property, which currently receives water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in her blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

	1
	2
	3
	4
	5
	6
	7
	8
	9
1	0
1	1
1	2
1	3
	4
	5
	6
	7
	8
1	9
2	0
2	1
2	
2	
2	4
2	5

26

69. Plaintiff Justin Werst is a resident of Yakima, Washington, who currently resides at 290 Perry Way. Plaintiff obtains water from a private well. PFCs, including but not limited to PFOA and PFOS, have entered the water, property, and soil, including but not limited to through the accumulation in the pipes, faucets, showerheads, and appliances, as well as through watering the lawn. Plaintiff has been exposed to elevated levels of PFCs through Plaintiff's water and has a bioaccumulation of PFCs in his blood. Plaintiff is also at an increased risk of developing several health conditions, including but not limited to effects on the liver and immune system, high cholesterol levels, changes in thyroid hormone, and kidney cancer.

# B. Defendants

70. The term "Defendants" refers to all Defendants named herein jointly and severally.

### i. The AFFF Defendants

- 71. The term "AFFF Defendants" refers collectively to Defendants 3M Company, Angus International Safety Group, Ltd., Amerex Corporation, Buckeye Fire Equipment Company, Carrier Global Corporation, Central Sprinkler, LLC, Chemguard Inc., Fire Products GP Holding, LLC, Johnson Controls International PLC, Kidde-Fenwal, Inc., National Foam, Inc., and Tyco Fire Products L.P.,
- 72. **Defendant The 3M Company f/k/a Minnesota Mining and Manufacturing Co. ("3M")** is a corporation organized and existing under the laws of

**CLASS ACTION COMPLAINT - 38** 

1	79.	Tyco is the successor in interest of The Ansul Company ("Ansul"), having
2 3	acquired Ar	nsul in 1990.
4	80.	Beginning in or around 1975, Ansul designed, manufactured, marketed,
5	distributed,	and sold AFFF containing PFAS, including but not limited to PFOA and
6 7	PFOS.	
8	81.	After Tyco acquired Ansul in 1990, Tyco/Ansul continued to design,
9	manufactur	e, market, distribute, and sell AFFF products containing PFAS, including
10	but not limi	ted to PFOA and PFOS.
12	82.	Defendant Chemguard, Inc. ("Chemguard") is a corporation
13	organized u	under the laws of the State of Texas, with its principal place of business
14   15	located at C	One Stanton Street, Marinette, Wisconsin 54143.
16	83.	On information and belief, Chemguard designed, manufactured,
17	marketed, d	distributed, and sold AFFF products containing PFAS, including but not
18 19	limited to P	FOA and PFOS.
20	84.	On information and belief, Chemguard was acquired by Tyco
21	   Internationa	al Ltd. in 2011.
22   23	85.	Defendant Buckeye Fire Equipment Company ("Buckeye") is a
24	corporation	organized under the laws of the State of Ohio, with its principal place of
25 26	business loc	cated at 110 Kings Road, Kings Mountain, North Carolina 28086.

1	93. On information and belief, Angus Fire Armour Corporation had
2	previously been acquired by Williams Holdings in 1994.
3	
4	94. On information and belief, Williams Holdings was demerged into Chubb
5	and Kidde P.L.C. in or around 2000.
6	95. On information and belief, when Williams Holdings was demerged,
7	
8	Kidde P.L.C. became the successor in interest to National Foam System, Inc. and
9	Angus Fire Armour Corporation.
10	96. On information and belief, Kidde P.L.C. was acquired by United
11	
12	Technologies Corporation in or around 2005.
13	97. On information and belief, Angus Fire Armour Corporation and National
14	Foam separated from United Technologies Corporation in or around 2013.
15	
16	98. <b>Defendant Kidde-Fenwal, Inc. ("Kidde-Fenwal")</b> is a corporation
17	organized under the laws of the State of Delaware, with its principal place of business
18	at One Financial Plaza, Hartford, Connecticut 06101.
19	
20	99. On information and belief, Kidde-Fenwal was an operating subsidiary of
21	Kidde P.L.C. and manufactured AFFF following Kidde P.L.C.'s acquisition by United
22	Technologies Corporation.
23	
24	100. On information and belief, Kidde-Fenwal is the entity that divested the
25	AFFF business unit now operated by National Foam in 2013.
26	

1	101. Defendant Carrier Global Corporation ("Carrier") is a corporation
2	organized under the laws of the State of Delaware, with its principal place of business
3 4	at 13995 Pasteur Boulevard, Palm Beach Gardens, Florida 33418.
5	102. On information and belief, Carrier was formed in March 2020 when
6	United Technologies Corporation spun off its fire and security business before it
7	
8	merged with Raytheon Company in April 2020.
9	103. On information and belief, Kidde-Fenwal became a subsidiary of Carrier
10 11	when United Technologies Corporation spun off its fire and security business in March
12	2020.
13	104. On information and belief, the AFFF Defendants designed, manufactured,
14	
15	marketed, distributed, and sold AFFF products containing PFOS, PFOA, and/or their
16	chemical precursors that were stored, handled, used, trained with, tested equipment
17	with, otherwise discharged, and/or disposed at YTC.
18	ii. The Fluorosurfactant Defendants
19	n. The Fluorosurfactant Detendants
20	105. The term "Fluorosurfactant Defendants" refers collectively to
21	Defendants 3M, , Arkema Inc., ChemDesign Products Incorporated, Chemguard Inc.,
<ul><li>22</li><li>23</li></ul>	Deepwater Chemicals, Inc., E.I. DuPont de Nemours and Company, The Chemours
24	Company, The Chemours Company FC, LLC, DuPont de Nemours Inc., and Dynax
<ul><li>25</li><li>26</li></ul>	Corporation.

1	106. <b>Defendant Arkema Inc.</b> is a corporation organized and existing under
2 3	the laws of Pennsylvania, with its principal place of business at 900 First Avenue, King
4	of Prussia, PA 19406.
5	107. Arkema Inc. develops specialty chemicals and polymers.
6	108. Arkema, Inc. is an operating subsidiary of Arkema France, S.A.
7 8	109. On information and belief, Arkema Inc. designed, manufactured,
9	marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their
10	chemical precursors for use in AFFF products.
11   12	110. <b>Defendant ChemDesign Products Inc. ("ChemDesign")</b> is a
13	corporation organized under the laws of Delaware, with its principal place of business
14 15	located at 2 Stanton Street, Marinette, WI, 54143.
16	111. On information and belief, ChemDesign designed, manufactured,
17	marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their
18 19	chemical precursors for use in AFFF products
20	112. <b>Defendant Deepwater Chemicals, Inc. ("Deepwater")</b> is a corporation
21	organized under the laws of Delaware, with its principal place of business located at
22 23	196122 E County Road 40, Woodward, OK, 73801.
24	113. On information and belief, Deepwater Chemicals designed,
25	manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS,
26	PFOA, and/or their chemical precursors for use in AFFF products

belief, Chemours Co. has supplied fluorosurfactants containing PFOS and PFOA, and/or their chemical precursors to manufacturers of AFFF products.

- 120. On information and belief, Chemours Co. was incorporated as a subsidiary of DuPont as of April 30, 2015. From that time until July 2015, Chemours Co. was a wholly-owned subsidiary of DuPont.
- 121. In July 2015, DuPont spun off Chemours Co. and transferred to Chemours Co. its "performance chemicals" business line, which includes its fluoroproducts business, distributing shares of Chemours Co. stock to DuPont stockholders, and Chemours Co. has since been an independent, publicly-traded company.
- 122. **Defendant The Chemours Company FC, LLC ("Chemours FC")** is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, Delaware, 19899.
- 123. **Defendant Corteva, Inc. ("Corteva")** is a corporation organized and existing under the laws of Delaware, with its principal place of business at 974 Centre Rd., Wilmington, Delaware 19805.
- 124. **Defendant Dupont de Nemours Inc. f/k/a DowDuPont, Inc. ("Dupont de Nemours Inc.")** is a corporation organized and existing under the laws of Delaware, with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805 and 2211 H.H. Dow Way, Midland, Michigan 48674.

1	125. On June 1, 2019, DowDuPont separated its agriculture business through
2	the spin-off of Corteva.
3	
4	126. Corteva was initially formed in February 2018. From that time until June
5	1, 2019, Corteva was a wholly-owned subsidiary of DowDuPont.
6	127. On June 1, 2019, DowDuPont distributed to DowDuPont stockholders all
7	
8	issued and outstanding shares of Corteva common stock by way of a pro-rata dividend.
9	Following that distribution, Corteva became the direct parent of E. I. Du Pont de
10	Nemours & Co.
11	
12	128. Corteva holds certain DowDuPont assets and liabilities, including
13	DowDuPont's agriculture and nutritional businesses.
14	100 O I 1 2010 D D D I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
15	129. On June 1, 2019, DowDuPont, the surviving entity after the spin-off of
16	Corteva and of another entity known as Dow, Inc., changed its name to DuPont de
17	Nemours, Inc., to be known as DuPont ("New DuPont"). New DuPont retained assets
18	
19	in the specialty products business lines following the above-described spin-offs, as well
20	as the balance of the financial assets and liabilities of E.I DuPont not assumed by
21	Corteva.
22	
23	130. Defendants E. I. Du Pont de Nemours and Company; The Chemours
24	Company; The Chemours Company FC, LLC; Corteva, Inc.; and DuPont de Nemours,
25	Inc. are collectively referred to as "DuPont" throughout this Complaint.
26	and the completion of the second the completion

1	131. On information and belief, DuPont designed, manufactured, marketed
2 3	distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemica
4	precursors for use in AFFF products.
5	132. On information and belief, 3M and Chemguard also designed
6 7	manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS
8	PFOA, and/or their chemical precursors for use in AFFF products.
9	133. On information and belief, the Fluorosurfactant Defendants designed
10	manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS
11 12	PFOA, and/or their chemical precursors for use in AFFF products that were stored
13	handled, used, trained with, tested equipment with, otherwise discharged, and/or
14	manarea, asea, transea with, testea equipment with, emerwise alsonargea, and e
	disposed at VTC
15	disposed at YTC.
<ul><li>15</li><li>16</li></ul>	iii. The PFC Defendants
16	iii. The PFC Defendants
16 17 18	<ul><li>iii. The PFC Defendants</li><li>134. The term "PFC Defendants" refers collectively to 3M, AGC, Inc., AGC</li></ul>
16 17 18 19	<ul> <li>iii. The PFC Defendants</li> <li>134. The term "PFC Defendants" refers collectively to 3M, AGC, Inc., AGC</li> <li>Chemicals Americas Inc., Archroma U.S. Inc., ChemDesign Products Inc., Chemicals</li> </ul>
16 17 18 19 20 21 22	iii. The PFC Defendants  134. The term "PFC Defendants" refers collectively to 3M, AGC, Inc., AGC Chemicals Americas Inc., Archroma U.S. Inc., ChemDesign Products Inc., Chemicals Inc., Clariant Corporation, Deepwater Chemicals, Inc., E. I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, Corteva, Inc.
16 17 18 19 20 21 22 23	iii. The PFC Defendants  134. The term "PFC Defendants" refers collectively to 3M, AGC, Inc., AGC Chemicals Americas Inc., Archroma U.S. Inc., ChemDesign Products Inc., Chemicals Inc., Clariant Corporation, Deepwater Chemicals, Inc., E. I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, Corteva, Inc. DuPont de Nemours Inc., and Nation Ford Chemical Company.
16 17 18 19 20 21 22	iii. The PFC Defendants  134. The term "PFC Defendants" refers collectively to 3M, AGC, Inc., AGC Chemicals Americas Inc., Archroma U.S. Inc., ChemDesign Products Inc., Chemicals Inc., Clariant Corporation, Deepwater Chemicals, Inc., E. I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, Corteva, Inc.

1	has its principal place of business at 1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-8405
2 3	Japan.
4	136. On information and belief, AGC was founded more than a hundred years
5	ago and was the first Japanese producer of sheet glass.
6 7	137. On information and belief, AGC expanded its operations in the 1960s by
8	developing a fluorochemical business segment that sold products such as the water and
9	oil repellent agents AsahiGuard and fluoropolymer film F-CLEAN.
10 11	138. On information and belief, AGC designed, manufactured, marketed,
12	distributed, and sold fluorochemicals containing PFOS, PFOA, and/or their chemical
13	precursors for use in manufacturing the fluorosurfactants used in AFFF products.
14	120 Defendant ACC Chamicals Americas Inc. ("ACCCA?") is a
15	139. Defendant AGC Chemicals Americas, Inc. ("AGCCA") is a
16	corporation organized and existing under the laws of Delaware, having its principal
17	place of business at 55 East Uwchlan Avenue, Suite 201, Exton, PA 19341.
18	140. On information and belief, AGCCA was formed in 2004 and is a
19	
20	subsidiary of AGC, Inc.
21	141. AGCCA manufactures specialty chemicals. It offers glass, electronic
22	displays, and chemical products, including resins, water and oil repellants, greenhouse
<ul><li>23</li><li>24</li></ul>	films, silica additives, and various fluorointermediates.
25	inne, and additives, and various inscremitations.
۷٤	
26	

1	154. On information and belief, the Fluorochemical Defendants supplied PFCs
2	containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the
4	fluorosurfactants used in AFFF products that were stored, handled, used, trained with,
5	tested equipment with, otherwise discharged, and/or disposed at YTC.
6 7	155. All Defendants, at all times material herein, acted by and through their
8	respective agents, servants, officers and employees, actual or ostensible, who then and
9	there were acting within the course and scope of their actual or apparent agency,
<ul><li>10</li><li>11</li></ul>	authority or duties. Defendants are liable based on such activities, directly and
12	vicariously.
13	156. Defendants represent all or substantially all of the market for
<ul><li>14</li><li>15</li></ul>	AFFF/Component Products at YTC.
16	V. FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION
<ul><li>17</li><li>18</li></ul>	A. PFOA and PFOS and Their Risk to Public Health
19	157. PFAS are chemical compounds containing fluorine and carbon. These
20	substances have been used for decades in the manufacture of, among other things,
<ul><li>21</li><li>22</li></ul>	household and commercial products that resist heat, stains, oil, and water. These
23	substances are not naturally occurring and must be manufactured.
<ul><li>24</li><li>25</li></ul>	158. The two most widely studied types of these substances are PFOA and
26	PFOS.

- 159. PFOA and PFOS have unique properties that cause them to be: (i) mobile and persistent, meaning that they readily spread into the environment where they break down very slowly; (ii) bioaccumulative and biomagnifying, meaning that they tend to accumulate in organisms and up the food chain; and (iii) toxic, meaning that they pose serious health risks to humans and animals.
- 160. PFOA and PFOS easily dissolve in water, and thus they are mobile and easily spread in the environment. PFOA and PFOS also readily contaminate soils and leach from the soil into groundwater, where they can travel significant distances.
- 161. PFOA and PFOS are characterized by the presence of multiple carbon-fluorine bonds, which are exceptionally strong and stable. As a result, PFOA and PFOS are thermally, chemically, and biologically stable. They resist degradation due to light, water, and biological processes.
- 162. Bioaccumulation occurs when an organism absorbs a substance at a rate faster than the rate at which the substance is lost by metabolism and excretion. Biomagnification occurs when the concentration of a substance in the tissues of organisms increases as the substance travels up the food chain.
- 163. PFOA and PFOS bioaccumulate/biomagnify in numerous ways. First, they are relatively stable once ingested, so that they bioaccumulate in individual organisms for significant periods of time. Because of this stability, any newly ingested

1	PFOA and PFOS will be added to any PFOA and PFOS already present. In humans
2 3	PFOA and PFOS remain in the body for years.
4	164. PFOA and PFOS biomagnify up the food chain. This occurs, for example
5	when humans eat fish that have ingested PFOA and/or PFOS.
6 7	165. The chemical structure of PFOA and PFOS makes them resistant to
8	breakdown or environmental degradation. As a result, they are persistent when released
9	into the environment.
10 11	166. Exposure to PFAS is toxic and poses serious health risks to humans and
12	animals.
13	167. PFAS are readily absorbed after consumption or inhalation and
14 15	accumulate primarily in the bloodstream, kidney, and liver.
16	B. Defendants' Manufacture and Sale of AFFF/Component Products
17	168. AFFF is a type of water-based foam that was first developed in the 1960s
18 19	to extinguish hydrocarbon fuel-based fires.
20	169. AFFF is a Class-B firefighting foam. It is mixed with water and used to
21 22	extinguish fires that are difficult to fight, particularly those that involve petroleum or
23	other flammable liquids.
24	170. AFFF is synthetically formed by combining fluorine-free hydrocarbor
25	foaming agents with fluorosurfactants. When mixed with water, the resulting solution
26	

- 181. On information and belief, 3M and DuPont concealed from the public and government agencies its knowledge of the threats to public health and the environment posed by PFOA and PFOS.
- 182. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.
  - i. 1940s and 1950s: 3M, DuPont, and the Development of a Toxic Chemical Family
- 183. The development of this family of chemical compounds began with Defendant 3M in the 1940s. At that time, 3M's Central Research Laboratory was working with a scientist at Penn State University, Joseph H. Simons, who had developed and patented a process of preparing fluorine compounds through electrochemical fluorination ("ECF"). In 1945, 3M acquired Simons' ECF patents. It would be another three years before 3M's Central Research developed fluorinated compounds that could be used for commercial applications. During that time, 3M scientists continuously researched and created new fluorochemicals; in the words of

one researcher, "[a]lmost every day we made a new molecule which had never been on 2 the face of the earth before."1 3 184. From the early days of its fluorochemical research, 3M recognized the 4 5 very characteristics that make PFAS persistent pollutants in the environment today. For 6 example, Simons' 1948 patent for the ECF process, which was assigned to 3M, stated 7 that the compounds produced through ECF are non-corrosive, and of little chemical 8 9 reactivity, and do not react with any of the metals at ordinary temperatures and react 10 only with the more chemically reactive metals such as sodium, at elevated 11 temperatures.<sup>2</sup> The patent also stated that the fluorochemicals produced by the ECF 12 13 process do not react with other compounds or reagents due to the blanket of fluorine 14 atoms surrounding the carbon skeleton of the molecule. 3M understood that the stability 15 16 17 18 19 20 21 <sup>1</sup> Neil McKay, A Chemical History of 3M: 1933-1990. 22 https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1365.pdf 23 <sup>2</sup> Simons, J. H., Fluorination of Organic Compounds, U.S. Patent No. 24 25 2,447,717. August 24, 1948, available at 26 https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1005.pdf.

1	of the carbon-to-fluorine bonds prevented its fluorosurfactants from undergoing further
2	
3	chemical reactions or degrading under natural processes in the environment. <sup>3</sup>
4	185. 3M was also aware of the thermal stability of is fluorinated compounds
5	prior to commercial production. Simons' ECF patent application states that the
6	compounds produced by the ECF process were thermally stable at temperatures up to
7 8	750° C (1382° F). Additional research by 3M expanded its understanding of the thermal
9	stability of fluorinated compounds. <sup>4</sup>
10	
11	186. In 1949, 3M built the first manufacturing facility to expand ECF from
12	laboratory research to commercial production, and it began to present its
13	fluorochemical research in order to find potential uses and customers for the
14 15	compounds it was manufacturing.
16	187. 3M soon found a customer: DuPont. In 1951, DuPont began purchasing a
17	perfluorinated carboxylic acid (perfluorooctanoic acid or PFOA), for use in
18	
19	manufacturing a non-stick coating called Teflon.
20	
21	<sup>3</sup> Simons, J. H., 1950. Fluorocarbons and Their Production. Fluorine
22	Chamister, 1(12), 401, 422, available at
23	Chemistry, 1(12): 401-422, available at
24	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX3008.pdf.
25	<sup>4</sup> Bryce, T. J., 1950. Fluorocarbons - Their Properties and Wartime
26	Development. Fluorine Chemistry, 1(13): 423-462.

1	188. Even then, 3M's research had already documented that PFAS accumulate
2 3	in the blood of mice exposed to the chemicals in laboratory tests. <sup>5</sup> Also, a 1956 study
4	by researchers at Stanford University found that PFAS bind to proteins in human
5	blood. <sup>6</sup>
6 7	189. In 1964, a group of DuPont employees working in Teflon manufacturing
8	became sick after their department was moved to a more enclosed workspace. <sup>7</sup> They
9	experienced chills, fever, difficulty breathing, and a tightness in the chest—symptoms
10	referred to variously as "polymer-fume fever," "Teflon flu," or simply, "the shakes."
11 12	Polymer-fume fever was first reported in medical literature in 1951.
13	
14	5.10.70.20.5
15	<sup>5</sup> 1950 3M test study results with Perfluorobutyric acid, <i>available at</i>
16	https://static.ewg.org/reports/2019/pfa-
17	timeline/1950_Mice.pdf?_ga=2.21758526.426747500.1673645134-
18	2012946541.1673645134.
<ul><li>19</li><li>20</li></ul>	<sup>6</sup> Perfluorooctanoic Acid Interactions with Human Serum Albumin, <i>available</i>
21	at https://static.ewg.org/reports/2019/pfa-
22	timeline/1956 Stanford.pdf? ga=2.59569645.1994765108.1678715813-
23	
24	<u>813372143.1678715813</u> .
25	<sup>7</sup> Charles E. Lewis and Gerald R. Kerby, <i>An Epidemic of Polymer-Fume Fever</i> ,
26	191 JAMA 375 (February 1, 1965).

# 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

25

26

#### ii. 1960s: AFFF's Environmental Hazards Come Into Focus

By at least the end of the 1960s, additional research and testing performed by 3M and DuPont indicated that fluorosurfactants, including at least PFOA, because of their unique chemical structure, were resistant to environmental degradation and would persist in the environment essentially unaltered if allowed to enter the environment.

191. One 3M employee wrote in 1964, "This chemical stability also extends itself to all types of biological processes; there are no known biological organisms that are able to attack the carbon-fluorine bond in a fluorocarbon."8 Thus, 3M knew by the mid-1960s that its fluorosurfactants were immune to chemical and biological degradation in soils and groundwater.

192. 3M also knew by 1964 that fluorocarbon carboxylic acids and fluorocarbon sulfonic acids, when dissolved, dissociated to form highly stable perfluorocarboxylate and perfluorosulfonate ions. Later studies by 3M on the adsorption and mobility of FC-95 (the potassium salt of PFOS) and FC-143 (the

available at https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX3022.pdf.

<sup>&</sup>lt;sup>8</sup> Bryce, H.G., Industrial and Utilitarian Aspects of Fluorine Chemistry (1964),

23 24	1	during fire p	protection, training, and response activities conducted at the YTC, resulting
information and did not disclose the specific chemical ingredients of their formulations to government agencies or the public.  204. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.  31		in widesprea	ad PFAS contamination.
to government agencies or the public.  204. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.  iii. 1970s -1980s: Defendants Deepening Knowledge of the Risks of PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.	4	203.	The AFFF Defendants treated their foam formulations as proprietary
to government agencies or the public.  204. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.  iii. 1970s -1980s: Defendants Deepening Knowledge of the Risks of PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.	5	information	and did not disclose the specific chemical ingredients of their formulations
204. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.  iii. 1970s -1980s: Defendants Deepening Knowledge of the Risks of PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.		to governme	ent agencies or the public.
to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.  iii. 1970s -1980s: Defendants Deepening Knowledge of the Risks of PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.	·	204.	Some or all of the Defendants understood how stable the fluorinated
to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.  iii. 1970s -1980s: Defendants Deepening Knowledge of the Risks of PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.		surfactants u	used in AFFF are when released into the environment from their first sale
on how to manage wastes generated from their products.  iii. 1970s -1980s: Defendants Deepening Knowledge of the Risks of PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.		to a custome	er, yet they failed to warn their customers or provide reasonable instruction
PFOA and PFOS  205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.		on how to m	nanage wastes generated from their products.
205. By at least the 1970s, as Defendants expanded the market for AFFF formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.	13	iii.	• 0
formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  20 20 206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.	14		PFOA and PFOS
formulations containing PFOA and PFOS, 3M and DuPont knew or should have known that PFOA and PFOS are mobile and persistent, bioaccumulative and biomagnifying, and toxic.  20 21 206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.  23 24 25		205.	By at least the 1970s, as Defendants expanded the market for AFFF
and toxic.  20 21 206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF 22 accumulated in the human body and were "even more toxic" than previously believed. 23 24 25		formulations	containing PFOA and PFOS, 3M and DuPont knew or should have known
20 206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.  23 24 25	18	that PFOA a	nd PFOS are mobile and persistent, bioaccumulative and biomagnifying,
206. During the 1970s, 3M also learned that the fluorosurfactants used in AFFF accumulated in the human body and were "even more toxic" than previously believed.  23 24 25		and toxic.	
22 accumulated in the human body and were "even more toxic" than previously believed. 23 24 25		206.	During the 1970s, 3M also learned that the fluorosurfactants used in AFFF
24 25	22	accumulated	d in the human body and were "even more toxic" than previously believed.
25	23		
	24		
	25		
11		I	

1	207. An internal memo from 3M in 1971 states that "the thesis that there is 'no
2 3	natural sink' for fluorocarbons obviously demands some attention." But if 3M did
4	give this issue the attention demanded at this time, it did not share it with the public.
5	208. In 1975, two independent toxicologists, Dr. Warren Guy and Donald
6 7	Taves, discovered that an unidentified fluorine compound had been found in human
8	blood sampled from different blood banks. Dr. Guy contacted 3M to ask if it knew of
9	"possible sources" of the chemicals. 11 3M's scientists concluded internally that the
10 11	fluorine compounds resembled PFOS manufactured by 3M, but 3M did not share this
12	conclusion with the independent toxicologists or anyone else outside of 3M.
13	209. 3M did, however, test the blood of its own workers in 1976, finding "up
14 15	to 1000 times 'normal' amounts of organically bound fluorine in their blood."12
16	
17	<sup>10</sup> Memorandum from H.G. Bryce to R.M. Adams re: Ecological Aspects of
18 19	Fluorocarbons, Sept. 13, 1971, available at
20	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1088.pdf.
21	<sup>11</sup> Memorandum from G.H. Crawford to L.C. Krogh et al. re: Fluorocarbons in
22 23	Human Blood Plasma, Aug. 20, 1975, available at
24	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1118.pdf.
25	<sup>12</sup> 3M Chronology – Fluorochemicals in Blood, Aug. 26, 1977, <i>available at</i>
26	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1144.pdf.

1	210. By the mid-1970s, 3M and Ansul (and possibly other Defendants) had an	
2	intimate understanding of the persistent nature of PFCs. A 1976 study, for example,	
3		
4	observed no biodegradation of FC-95, the potassium salt of PFOS; a result 3M	
5	characterized as "unsurprising" in light of the fact that "[b]iodegradation of FC 95 is	
6 7	improbable because it is completely fluorinated."13	
8	211. In 1977, Ansul, the AFFF manufacturer later acquired by Defendant	
9	Tyco, authored a report titled "Environmentally Improved AFFF," which	
10	acknowledged that releasing AFFF into the environment could pose potential negative	
11	acknowledged that releasing ATTT into the environment could pose potential negative	
12	impacts to groundwater quality. <sup>14</sup> Ansul wrote: "The purpose of this work is to explore	
13	the development of experimental AFFF formulations that would exhibit reduced impact	
14		
15	on the environment while retaining certain fire suppression characteristic	
16	improvements [to AFFF formulations] are desired in the environmental area, i.e.,	
17	development of compositions that have a reduced impact on the environment without	
18	loss of fire suppression effectiveness." Thus, Ansul knew by the mid-1970s that the	
19	1035 of the suppression effectiveness. Thus, Thisur knew by the find 17705 that the	
20		
21		
22	13 Technical Report Summary, August 12, 1976 [3MA01252037].	
23		
24	<sup>14</sup> Ansul Co., Final Report: Environmentally Improved AFFF, N00173-76-C-	
25	0295, Marinette, WI, Dec. 13, 1977, available at	
26	https://apps.dtic.mil/dtic/tr/fulltext/u2/a050508.pdf.	

1	environmental impact of AFFF needed to be reduced, yet there is no evidence that	
2		
3	Ansul (or any other Defendant) ever pursued initiatives to do so.	
4	212. A 1978 3M biodegradation study likewise reported that an "extensive	
5	study strongly suggest[ed]" one of its PFAS was "likely to persist in the environment	
6 7	for extended period unaltered by metabolic attack." A year later, a 3M study reported	
8	that one of its fluorosurfactants "was found to be completely resistant to biological test	
9	conditions," and that it appeared waterways were the fluorosurfactant's "environmental	
10	sink." <sup>16</sup>	
11	SIIIK.	
12	213. At the same time, several studies sponsored by 3M showed that the	
13	fluorosurfactants used in AFFF were even more toxic than previously believed. A study	
14	of subacute toxicity in rhesus monkeys, in which the monkeys were to be given doses	
15	or success termony in messus members, in which the members were to be given deses	
16	of PFOS over ninety days, had to be redesigned and repeated "[b]ecause of unexpected	
17		
18		
19		
20	<sup>15</sup> Technical Report Summary re: Fate of Fluorochemicals in the Environment,	
21	Biodegradation Studies of Fluorocarbons - II, Jan. 1, 1978, available at	
22	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1153.pdf.	
<ul><li>23</li><li>24</li></ul>	<sup>16</sup> Technical Report Summary re: Fate of Fluorochemicals in the Environment,	
25		
	Biodegradation Studies of Fluorocarbons - III, July 19, 1978, available at	
26	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1179.pdf.	

1	early mortalities in all monkeys at all levels." None of the monkeys survived past
2 3	twenty days. As a summary of the study stated, PFOS "proved to be considerably more
4	toxic to monkeys than anticipated[.]" In addition, PFOA reduced the survival rate of
5	fathead minnow fish eggs, 18 and PFOS and PFOA were shown to be toxic to rats. 19 As
6	
7	
8	<sup>17</sup> Ninety-Day Subacute Rhesus Monkey Toxicity Study, Dec. 18, 1978,
10	available at <a href="https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1191.pdf">https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1191.pdf</a> ;
11	Aborted FC95 Monkey Study, Jan. 2, 1979, available at
12 13	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1193.pdf; FC-95, FC-
14	143 and FM-3422 – 90 Day Subacute Toxicity Studies Conducted at IRDC – Review
15	of Final Reports and Summary, available at https://static.ewg.org/reports/2019/pfa-
<ul><li>16</li><li>17</li></ul>	timeline/1977_Most%20Toxic.pdf?_ga=2.34744996.426747500.1673645134-
18	2012946541.1673645134.
19	<sup>18</sup> The Effects of Continuous Aqueous Exposure to 78.03 on Hatchability of
<ul><li>20</li><li>21</li></ul>	Eggs and Growth and Survival of Fry of Fathead Minnow, June 1978, available at
22	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1176.pdf.
23	<sup>19</sup> Acute Oral Toxicity (LD <sub>50</sub> ) Study in Rats (FC-143), May 5, 1978, <i>available</i>
24	at https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1170.pdf; FC-95, FC-
25	
26	143 and FM-3422 – 90 Day Subacute Toxicity Studies Conducted at IRDC – Review

1	the summary documented observed, "[b]ecause of the apparent persistence of these
2 3	fluorochemicals in the body, the most important question remains possible long term
4	effects." <sup>20</sup>
5	214. In 1979, 3M also completed a comprehensive biodegradation and toxicity
6	study covering investigations between 1975 and 1978. <sup>21</sup> More than a decade after 3M
7 8	began selling AFFF containing fluorosurfactants it wrote, "there has been a general
9	lack of knowledge relative to the environmental impact of these chemicals." The report
10	
11	
12	
13	
14	
15	
16	
17	of Final Reports and Summary, Mar. 20, 1979, available at
18	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1199.pdf.
19 20	<sup>20</sup> <i>Id.</i> (FC-95, FC-143 and FM-3422 – 90 Day Subacute Toxicity Studies
21	Conducted at IRDC – Review of Final Reports and Summary, Mar. 20, 1979,
22	available at https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1199.pdf.)
23	<sup>21</sup> Technical Report Summary, Final Comprehensive Report on FM 3422, Feb.
24	
25	2, 1979, available at
26	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX2563.pdf.

1	217. In 1981, DuPont tested for and found PFOA in the blood of female plant
2	workers at its Washington Works plant in Parkersburg, West Virginia, where it had
3	
4	been using 3M's PFOA to manufacture Teflon since 1951. DuPont observed and
5	documented pregnancy outcomes in exposed workers, finding two of seven children
6 7	born to female plant workers between 1979 and 1981 had birth defects—one an
8	"unconfirmed" eye and tear duct defect, and one a nostril and eye defect. <sup>24</sup>
9	218. In 1983, 3M researchers concluded that concerns about PFAS "give rise
10	to concern for environmental safety," including "legitimate questions about the
11	to concern for environmental safety, merading regimnate questions about the
12	persistence, accumulation potential, and ecotoxicity of fluorochemicals in the
13	environment." <sup>25</sup> That same year, 3M completed a study finding that PFOS caused the
14	growth of cancerous tumors in rats. <sup>26</sup> This finding was later shared with DuPont and
15	growth of cancerous tumors in rats. This finding was later shared with Dur ont and
16	
17	
18	<sup>24</sup> C-8 Blood Sampling Results, <i>available at</i> http://tiny.cc/v8z1mz.
19	
20	<sup>25</sup> 3M Environmental Laboratory (EE & PC), Fate of Fluorochemicals - Phase
21	II, May 20, 1983, available at
22	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1284.pdf.
23	26 T. W. O. 1 (D' ) T. ' ' (Q ' ' ' ' ' Q ' 1 CE1 1 ' 1
24	<sup>26</sup> Two Year Oral (Diet) Toxicity/Carcinogenicity Study of Fluorochemical
25	FC-143 in Rats, Volume 1 of 4, Aug. 29, 1987, available at
26	https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1337.pdf.

## 1 1990s-2000s: With 3M and DuPont Under Scrutiny, the AFFF iv. Market Shifts to Telomerization 2 3 Federal law requires chemical manufacturers and distributors to 4 immediately notify the EPA if they have information that "reasonably supports the 5 conclusion that such substance or mixture presents a substantial risk of injury to health 6 7 or the environment." Toxic Substances Control Act ("TSCA") § 8(e), 15 U.S.C. § 8 2607(e). 9 Despite its decades of research, 3M waited until May 1998 to submit a 10 11 report to the EPA under TSCA Section 8(e). Even in that submission, however, 3M 12 downplayed what it knew, according to a former employee: 13 Just before that submission we found PFOS in the blood of eaglets—eaglets still 14 young enough that their only food consisted of fish caught in remote lakes by their 15 parents. This finding indicates a widespread environmental contamination and food chain transfer and probable bioaccumulation and bio-magnification. This is a very 16 significant finding that the 8(e) reporting rule was created to collect. 3M chose to report 17 simply that PFOS had been found in the blood of animals, which is true but omits the most significant information.<sup>29</sup> 18 19 223. Although 3M acknowledged, in 1998, the presence of PFOS in the blood 20 of the general population, it insisted that it did not "believe that any reasonable basis" 21 exists to conclude that PFOS 'presents a substantial risk of injury to health or the 22 23 24 25 <sup>29</sup> Letter from R. Purdy, Mar. 28, 1999, available at 26 https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1001.pdf.

environment." Internally, the message was quite different: 3M's Manager of Corporate 2 Toxicology advised the company to replace "PFOS-based chemistry as these 3 compounds [are] VERY persistent and thus insidiously toxic." 4 5 224. In 2000, 3M, after half a century of manufacturing fluorinated chemicals 6 through ECF, announced that it would phase out its production of several long-chain 7 PFAS compounds, including PFOA, although it continued to manufacture other PFAS 8 9 chemicals. 10 In April 2006, 3M agreed to pay EPA a penalty of more than \$1.5 million 11 after being cited for 244 violations of the TSCA, which included violations for failing 12 13 to disclose studies regarding PFOS, PFOA, and other fluorinated compounds, dating 14 back decades. 15 226. Likewise, in December 2005, the EPA announced it was imposing the 16 17 "Largest Environmental Administrative Penalty in Agency History" against DuPont 18 based on evidence that it violated the TSCA by concealing the environmental and 19 health effects of PFOA. 20 21 On information and belief, Defendants knew or should have known that 22 AFFF containing PFOA or PFOS would very likely injure and/or threaten public health 23 and the environment, even when used as intended or directed. 24 25 26

PFOS had been found in the blood of animals, which is true but omits the most significant information," according to a former 3M employee.<sup>30</sup>

- 232. On information and belief, 3M began in 2000 to phase out its production of products that contained PFOS and PFOA in response to pressure from the EPA.
- 233. Once the truth about PFOS and PFOA was revealed, researchers began to study the environmental and health effects associated with them, including a "C8 Science Panel" formed out of a class action settlement arising from contamination from DuPont's Washington Works located in Wood County, West Virginia.
- 234. The C8 panel consisted of three epidemiologists specifically tasked with determining whether there was a probable link between PFOA exposure and human diseases. In 2012, the panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy-induced hypertension (including preeclampsia), and hypercholesterolemia.
- 235. Human health effects associated with PFOS exposure include immune system effects, changes in liver enzymes and thyroid hormones, low birth weight, high uric acid, and high cholesterol. In laboratory testing on animals, PFOA and PFOS have

https://www.ag.state.mn.us/Office/Cases/3M/docs/PTX/PTX1001.pdf.

<sup>&</sup>lt;sup>30</sup> Id. Letter from R. Purdy, Mar. 28, 1999, available at

caused the growth of tumors, changed hormone levels, and affected the function of the liver, thyroid, pancreas, and immune system.

- 236. The injuries caused by PFAS can arise months or years after exposure.
- 237. Even after the C8 Science Panel publicly announced that human exposure to 50 parts per trillion, or more, of PFOA in drinking water for one year or longer had "probable links" with certain human diseases, including kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, preeclampsia, and medically-diagnosed high cholesterol, Defendants repeatedly assured and represented to governmental entities, their customers, and the public (and continue to do so) that the presence of PFOA in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind.
- 238. Furthermore, Defendants have represented to and assured such governmental entities, their customers, and the public (and continue to do so) that the work of the independent C8 Science Panel was inadequate to satisfy the standards of Defendants to prove such adverse effects upon and/or any risk to humans with respect to PFOA in human blood.
- 239. At all relevant times, Defendants, through their acts and/or omissions, controlled, minimized, trivialized, manipulated, and/or otherwise influenced the information that was published in peer-review journals, released by any governmental entity, and/or otherwise made available to the public relating to PFAS in human blood

and any alleged adverse impacts and/or risks associated therewith, effectively preventing the public from discovering the existence and extent of any injuries/harm as alleged herein.

E. The Fire Fighting Foam Coalition

240. Following 3M's phase-out of ECF production and its AFFF product, telomerization emerged as the dominant manufacturing process for fluorosurfactants. 3M had been the dominant manufacturer in the lucrative AFFF market, and multiple companies seized the opportunity created by 3M's withdrawal. But the market opportunity presented uncertainties, as it was unclear whether regulators would view the telomer-based AFFF as posing the same hazards as 3M's PFOS-containing AFFF. The key question for regulators was whether the telomer-based AFFF would degrade to PFOA once in the environment.

241. Defendants Tyco, Chemguard, Kidde, National Foam, and Buckeye formed a group called the Fire Fighting Foam Coalition ("FFFC") to protect their business opportunity and advocate for the continued use of telomer-based AFFF. The FFFC declared that it would serve as "a single source for accurate, balanced information on environment related questions" and would "ensure that accurate information about PFOS alternatives, including telomer-based products, is

1	disseminated in the marketplace." <sup>31</sup> The FFFC made several representations regarding			
2	the safety of telomer-based AFFF that were either misleading half-truths or wer			
3   4	contrary to Defendants' internal knowledge. For example, the FFFC assured the public			
5	that "telomer based AFFF does not contain PFOS and cannot be oxidized or			
6				
7	metabolized into PFOS."32 This statement was true, but only because PFOS was			
8	exclusively manufactured by 3M, and it did not mean that telomer-based AFFF was			
9	any safer.			
10   11	242. The FFFC also told the EPA in 2001 that telomer-based AFFF "does not			
12	contain any PFOA-based product." <sup>33</sup> The issue, however, was whether telomer-based			
13	AFFF could degrade into PFOA. One company executive admitted in an internal memo			
14				
15	<sup>31</sup> Fact Sheet on AFFF Fire Fighting Agents, <i>available at</i>			
16   17	https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2002-03-			
18				
19	FFFC.pdf?_ga=2.136386352.1253861871.1649070681-2123137255.1639662520.			
20	<sup>32</sup> <i>Id.</i> Fact Sheet on AFFF Fire Fighting Agents, <i>available at</i>			
21	https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2002-03-			
22   23	FFFC.pdf?_ga=2.136386352.1253861871.1649070681-2123137255.1639662520.			
24	<sup>33</sup> <i>Id.</i> Fact Sheet on AFFF Fire Fighting Agents, available at			
25	https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2002-03-			
26	FFFC.pdf? ga=2.136386352.1253861871.1649070681-2123137255.1639662520.			

1	that his company's AFFF "will degrade in the environment" to produce PFOA and the		
2	"question is how toxic" and how "bioaccumulative" these degraded products are. 34 But		
3	question is now toxic una now orone animative these degraded products are. Dut		
4	contrary to this internal acknowledgment, the FFFC publicly asserted that "telomer		
5	based fire fighting foams are not likely to be a source of PFOA in the environment."35		
6	243. The EPA appointed a committee known as the Telomer Technical		
7	243. The LITT appointed a commutee known as the Telomer Teenmear		
8	Workgroup to make recommendations to the agency. The president of the FFFC		
9	represented the telomer-based AFFF industry on the EPA committee. When, in 2003,		
10	the Telomer Technical Workgroup reported its conclusions and recommendations, the		
11	the reformer recrimear workgroup reported its conclusions and recommendations, the		
12	FFFC president was the spokesperson.		
13			
14			
15			
16	<sup>34</sup> In Re: Aqueous Film-Forming Foams Prods. Liab. Litig., 2:18-mn-02873-		
17	RMG:28, Email chain from John Dowling to Anne Regina re: EPA meeting:		
18	Comments (Apr. 18, 2001) attached as an exhibit to Plaintiffs' Omnibus Opposition		
19	Comments (Apr. 16, 2001) attached as an exhibit to Framulis Onlinous Opposition		
20	to Defendants' Motion for Partial Summary Judgment on the Second and Third		
21	Prongs of the Government Contractor Immunity Defense, ECF 2409-112.		
22	35 DEO A EC A Discours Marking a monitoria no		
23	<sup>35</sup> PFOA ECA Plenary Meeting, available at		
24	https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-		
25	Telomers_Safe_Email.pdf?_ga=2.128105996.1253861871.1649070681-		
26	<u>2123137255.1639662520</u> .		

1	244. In what the FFFC president called a "major victory" for the industry, the		
2	EPA accepted the proposal of its Workgroup that "telomer-based fire fighting foams		
3			
4	no longer be considered as part of the PFOA ECA process."36 The FFFC president		
5	remarked that "[w]hen we started this organization two years ago [in 2001], the fate of		
6	telomer based AFFF was being tied directly to the fate of PFOA and the EPA had just		
7			
8	told the military to start searching for alternatives to AFFF." <sup>37</sup> The telomer-based AFFF		
9	Defendants had successfully forestalled government restrictions on their products,		
10	thereby prolonging the use of AFFF at the YTC and elsewhere.		
11			
12	245. The fluorochemicals the Fluorosurfactant Defendants needed to		
13	manufacture those fluorosurfactants contained PFOS, PFOA, and/or their chemical		
14			
15	36 <i>Id.</i> PFOA ECA Plenary Meeting, <i>available at</i>		
16	a. Froa ECA Flenary Meeting, available at		
17	https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-		
18	Telomers Safe Email.pdf? ga=2.128105996.1253861871.1649070681-		
19	2122127255 1620662520		
20	<u>2123137255.1639662520</u> .		
21	<sup>37</sup> <i>Id.</i> PFOA ECA Plenary Meeting, <i>available at</i>		
22	https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-		
23	Tolomora Sofo Empil pdf? co=2 120105006 1252061071 1640070601		
24	Telomers_Safe_Email.pdf?_ga=2.128105996.1253861871.1649070681-		
25	<u>2123137255.1639662520</u> .		
26			

precursors and were designed, manufactured, marketed, distributed and/or sold by the 2 Fluorochemical Defendants. 3 246. On information and belief, the Fluorochemical and Fluorosurfactant 4 5 Defendants were aware that the fluorochemicals and fluorosurfactants they designed, 6 manufactured, marketed, distributed, and/or sold would be used in the AFFF products 7 designed, manufactured, marketed, distributed, and/or sold by the AFFF Defendants. 8 9 247. On information and belief, the PFC and Fluorosurfactant Defendants 10 designed, manufactured, marketed, distributed, and/or sold the fluorochemicals and/or 11 fluorosurfactants contained in the AFFF products discharged into the environment 12 13 during fire protection, training, and response activities conducted at the YTC, resulting 14 in widespread PFAS contamination. 15 F. Federal, State, and International Government Agencies Call for 16 **Monitoring and Cleanup of PFAS Contamination** 17 248. On May 2, 2012, the EPA published its Third Unregulated Contaminant 18 19 Monitoring Rule ("UCMR3"), requiring public water systems nationwide to monitor 20 for thirty contaminants of concern between 2013 and 2015, including PFOS and 21 PFOA.<sup>38</sup> 22 23 24 25 <sup>38</sup> Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR) 26 3) for Public Water Systems, 77 Fed. Reg: 26072 (May 2, 2012).

249. In the May 2015 "Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS's)," scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, limits on the manufacture and handling of any PFOA containing product, and to develop safe non-fluorinated alternatives to these products to avoid long-term harm to human health and the environment.<sup>39</sup>

250. On May 25, 2016, the EPA released a lifetime health advisory level (HAL) for drinking water and health effects support documents for PFOS and PFOA.<sup>40</sup> The EPA developed the HAL to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HAL identified the concentration of PFOS and PFOA in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70

<sup>&</sup>lt;sup>39</sup> Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly- and perfluoroalkyl substances (PFASs). Environ Health Perspect 123:A107–A111; <a href="http://dx.doi.org/10.1289/ehp.1509934">http://dx.doi.org/10.1289/ehp.1509934</a>.

<sup>&</sup>lt;sup>40</sup> See Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate.

1	ppt. The HAL was based on peer-reviewed studies of the effects of PFOS and PFOA		
2 3	on laboratory animals (rats and mice) and was also informed by epidemiological studies		
4	of human populations exposed to PFOS. These studies indicated that exposure to PFOS		
5	and PFOA over the HAL could result in adverse health effects, including:		
6 7	a. Developmental effects to fetuses during pregnancy or to breastfed infants		
8	(e.g., low birth weight, accelerated puberty, skeletal variations);		
9	b. Cancer (testicular and kidney);		
10	c. Liver effects (tissue damage);		
11	c. Liver circus (tissue duringe),		
12	d. Immune effects (e.g., antibody production and immunity);		
13	e. Thyroid disease and other effects (e.g., cholesterol changes).		
14			
15	251. In 2016, the National Toxicology Program of the United States		
16	Department of Health and Human Services ("NTP") and the International Agency for		
17 18	Research on Cancer ("IARC") both released extensive analyses of the expanding body		
19	of research regarding the adverse effects of fluorochemicals. The NTP concluded that		
20	both PFOA and PFOS are "presumed to be an immune hazard to humans" based on a		
21	"consistent pattern of findings" of adverse immune effects in human (epidemiology)		
22	consistent pattern of infamigs of develoe infinitely effectively)		
23			
24			
25			
26			

1	studies and "high confidence" that PFOA and PFOS exposure was associated with			
2 3	suppression of immune responses in animal (toxicology) studies. <sup>41</sup>			
4	252. IARC similarly concluded that there is "evidence" of "the carcinogenicity			
5	of PFOA" in humans and in experimental animals, meaning that "[a] positive			
6 7	association has been observed between exposure to the agent and cancer for which a			
8	causal interpretation is credible." <sup>42</sup>			
9	253. California has listed PFOA and PFOS to its Proposition 65 list as a			
10 11	chemical known to cause reproductive toxicity under the Safe Drinking Water and			
12	Toxic Enforcement Act of 1986. <sup>43</sup>			
13				
14				
15	<sup>41</sup> See U.S. Dep't of Health and Human Services, Nat'l Toxicology Program,			
16 17	NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic			
18	Acid or Perfluorooctane Sulfonate (Sept. 2016), at 1, 17, 19, available at			
19	https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf			
20 21	<sup>42</sup> See Int'l Agency for Research on Cancer, IARC Monographs: Some			
22	Chemicals Used as Solvents and in Polymer Manufacture (Dec. 2016), at 27, 97,			
23	available at http://monographs.iarc.fr/ENG/Monographs/vol110/mono110.pdf.			
24 25	<sup>43</sup> California Office of Environmental Health Hazard Assessment, <i>Chemicals</i>			
26	Listed Effective Nov. 10, 2017 as Known to the State of California to Cause			

1	254. The United States Senate and House of Representatives passed the			
2	National Defense Authorization Act in November 2017, which included \$42 million to			
3	National Defense Authorization Act in November 2017, which included \$42 infinion to			
4	remediate fluorochemical contamination from military bases, as well as devoting \$7			
5	million toward the Investing in Testing Act, which authorizes the Center for Disease			
6	Control and Prevention ("CDC") to conduct a study into the long-term health effects of			
7	, , , , , , , , , , , , , , , , , , ,			
8	PFOA and PFOS exposure. <sup>44</sup> The legislation also required that the Department of			
9	Defense submit a report on the status of developing a new military specification for			
10	AFFF that did not contain PFOS or PFOA. <sup>45</sup>			
11				
12				
13				
14	Reproductive Toxicity: Perfluorooctanoic Acid (PFOA) and Perfluorooctane			
<ul><li>15</li><li>16</li></ul>	Sulfonate (PFOS), Nov. 9, 2017, available at https://oehha.ca.gov/proposition-			
17	65/crnr/chemicals-listed-effective-november-10-2017-known-state-california-cause.			
18	<sup>44</sup> National Defense Authorization Act for Fiscal Year 2018, H.R. 2810, 115th			
19				
20	Congress (2017), available at <a href="https://www.congress.gov/115/plaws/publ91/PLAW-">https://www.congress.gov/115/plaws/publ91/PLAW-</a>			
21	<u>115publ91.pdf</u> .			
22	<sup>45</sup> <i>Id.</i> ; see also U.S. Department of Defense, <i>Alternatives to Aqueous Film</i>			
23				
24	Forming Foam Report to Congress, June 2018, available at			
25	https://www.denix.osd.mil/derp/home/documents/alternatives-to-aqueous-film-			
26	forming-foam-report-to-congress/.			

1	255. In June 2018, the Agency for Toxic Substances and Disease Registry			
2 3	("ATSDR") and EPA released a draft toxicological profile for PFOS and PFOA and			
4	recommended the drinking water advisory levels be lowered to 11 ppt for PFOA and			
5	7 ppt for PFOS. <sup>46</sup>			
6	256. In December 2019, the United States Senate and House of			
7 8	Representatives passed the National Defense Authorization Act for Fiscal Year 2020			
9	("FY 2020 NDAA"), which introduced new prohibitions on the use of PFAS-			
10	containing AFFF for land-based applications. <sup>47</sup> Section 322 of the Act introduced a			
11 12	timeline for the phasing out of AFFF use by the military, including by requiring the			
13				
14	Secretary of the Navy to publish a new military specification for a fluorine-free fire-			
15	fighting agent for use at all military installations by January 31, 2023. Section 322(b)			
16	and (c) then provide that Department of Defense organizations will no longer be			
17 18	authorized to purchase AFFF containing more than 1 part per billion of PFAS after			
19				
20				
21	46 ATSDR, Toxicological Profile for Perfluoroalkyls: Draft for Public			
22	Comment (June 2018), available at <a href="https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf</a> .			
<ul><li>23</li><li>24</li></ul>	<sup>47</sup> National Defense Authorization Act for Fiscal Year 2020, S. 1790, 116th			
25	Congress (2019), available at <a href="https://www.govinfo.gov/content/pkg/BILLS-">https://www.govinfo.gov/content/pkg/BILLS-</a>			
26	116s1790enr/pdf/BILLS-116s1790enr.pdf.			

Importantly, EPA set these interim HALs at levels below which PFOS and PFOA can 2 be measured using current analytic methods, meaning that the mere detection of PFOS 3 or PFOA in a water provider's system would be sufficient on its own to exceed the new 4 5 levels. 6 259. As support for its decision, EPA explained that the science had evolved 7 since 2016 and that the new interim HALs for PFOS and PFOA were "based on human" 8 9 studies" that "found associations between PFOA and/or PFOS exposure and effects on 10 the immune system, the cardiovascular system, human development (e.g., decreased 11 birth weight), and cancer."51 Specifically, EPA had performed updated health effects 12 13 analyses for PFOS and PFOA to provide support for the drinking water regulations the 14 agency planned to adopt for the two chemicals under the SDWA. Based on these 15 analyses, EPA concluded that "the levels at which negative health effects could occur 16 17 are much lower than previously understood when EPA issued the 2016 health 18 19 20 21 22 <sup>51</sup> EPA, Drinking Water Health Advisories for PFAS Fact Sheet for 23 Communities at 1-2 (June 2022), available at 24 25 https://www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-

Tel. (206) 264-8600

factsheet-communities.pdf..

26

1	advisories for PFOA and PFOS – including near zero for certain health effects."52 For			
2 3	this reason, the agency determined there was a "pressing need to provide updated			
4	information on the current best available science to public health officials prior to			
5	finalization of the health effects assessment."53			
6 7	260. Because the referenced health analyses are still undergoing final review			
8	by EPA's Science Advisory Board, the agency has stated that the new interim HALs			
9	for PFOS and PFOA are subject to change. EPA has indicated, however, that it does			
10				
11				
12				
13	<sup>52</sup> EPA, Drinking Water Health Advisories for PFAS Fact Sheet for Public			
14	Water Systems at 2 (June 2022), available at			
<ul><li>15</li><li>16</li></ul>	https://www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-			
17	<u>factsheet-water-system.pdf.</u>			
18	<sup>53</sup> EPA Office of Water, EPA Doc. No. 822-R-22-003, <i>INTERIM Drinking</i>			
<ul><li>19</li><li>20</li></ul>	Water Health Advisory: Perfluorooctanoic Acid (PFOA) CASRN 335-67-1 at 18			
21	(June 2022), available at <a href="https://www.epa.gov/system/files/documents/2022-">https://www.epa.gov/system/files/documents/2022-</a>			
<ul><li>22</li><li>23</li></ul>	06/interim-pfoa-2022.pdf; EPA Office of Water, EPA Doc. No. 822-R-22-004,			
24	INTERIM Drinking Water Health Advisory: CASRN 1763-23-1 at 18 (June 2022),			
25	available at https://www.epa.gov/system/files/documents/2022-06/interim-pfos-			
26	2022.pdf.			

1	not anticipate any changes resulting in revised HALs for PFOS and PFOA that are		
2	greater than the 4 ppt minimum reporting level <sup>54</sup> that applies to Public Water Systems.		
3	greater than the 4 ppt minimum reporting level—that applies to r tubic water systems.		
4	261. On September 6, 2022, EPA published a notice of proposed rulemaking		
5	seeking public comment on its plan to designate PFOS and PFOA as hazardous		
6	substances under CERCLA. <sup>56</sup> Pursuant to that notice, all comments from the publi		
7			
8	must be submitted by November 7, 2022.		
9			
10			
11			
12	<sup>54</sup> As EPA's website explains, the Minimum Reporting Level ("MRL") for		
13	Unregulated Contaminant Monitoring Rule (UCMR) 5 is the minimum quantitation		
14	level that, with 95 percent confidence, can be achieved by capable analysts at 75		
15			
16	percent or more of the laboratories using a specified analytical method. The MRLs in		
17	EPA's chart are based on the UCMR 5 requirement to use EPA Method 533.		
18	<sup>55</sup> EPA, Drinking Water Health Advisories for PFAS Fact Sheet for Public		
19			
20	Water Systems at 2 (June 2022), available at		
21	https://www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-		
22	factsheet-water-system.pdf.		
23			
24	<sup>56</sup> See Designation of Perfluorooctanoic Acid (PFOA) and		
25	Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances, 87 Fed.		
26	Reg. 54415 (Sep. 6, 2022).		

1	262. On January 6, 2023, the Defense Logistics Agency within the Department			
2 3	of Defense published a new Military Specification for "Fire Extinguishing Agent,			
4	Fluorine-Free Foam (F3) Liquid Concentrate, for Land-Based, Fresh Water			
5	Application," MIL-PRF-32725 ("F3 MilSpec") in accordance with § 332(a)(1) of the			
6 7	FY 2020 NDAA. <sup>57</sup> This new specification will govern fire extinguishing foams used by			
8	all Department of Defense organizations and will require such foams to test "non-detect"			
9	for PFAS. The specification further requires manufacturers to "certify in writing that			
<ul><li>10</li><li>11</li></ul>	PFAS has not intentionally been added to the concentrate."			
12	G. Use of AFFF at the Yakima Training Center			
13	263. The YTC is a sub-installation of Joint Base Lewis-McChord ("JBLM").			
<ul><li>14</li><li>15</li></ul>	It is located about 100 air miles east of JBLM and about 10 miles north of Yakima.			
16	YTC covers 327,231 acres in Yakima and Kittitas Counties.			
17	264. The YTC is an active fire suppressant training, testing, research, and			
<ul><li>18</li><li>19</li></ul>	development facility located at Washington State.			
20	265. For decades, YTC used its buildings and surroundings areas for			
21	firefighting activities. This type of training regularly included the use of AFFF as an			
<ul><li>22</li><li>23</li></ul>	extinguishing agent for Class B fires.			
<ul><li>23</li><li>24</li></ul>				
25				

https://quicksearch.dla.mil/qsDocDetails.aspx?ident\_number=285047.

<sup>57</sup> Available on the Defense Logistics Agency's website,

26

266. On information and belief, Plaintiffs and Class Members' contamination is a direct and proximate result of mandatory fire protection, firefighting exercises, fire training operations, and response activities at the YTC that used AFFF, resulting in the migration of PFAS into Plaintiff's water supplies.

# H. AFFF Containing PFOS and PFOA Is Fungible and Commingled in the Groundwater

- 267. AFFF containing PFOS and/or PFOA, once it has been released to the environment, lacks characteristics that would enable identification of the company that manufactured that particular batch of AFFF or chemical feedstock.
- 268. A subsurface plume, even if it comes from a single location, such as a retention pond or fire training area, originates from mixed batches of AFFF and chemical feedstock coming from different manufacturers.
- 269. Because precise identification of the specific manufacturer of any given AFFF/Component Product that was a source of the PFAS found at the YTC is nearly impossible, given certain exceptions, Plaintiff must pursue all Defendants, jointly and severally.
- 270. Defendants are also jointly and severally liable because they conspired to conceal the true toxic nature of PFOS and PFOA, to profit from the use of AFFF/Component Products containing PFOS and PFOA, at Plaintiff's expense, and to attempt to avoid liability.

### 1 VI. **CLASS ACTION ALLEGATIONS** 2 Plaintiffs bring this action as a class action on their own behalf and on 3 behalf of all other persons similarly situated as members of the proposed subclasses 4 5 and seek to certify and maintain it as a class action under Rules 23(a); (b)(1) and/or 6 (b)(2); and (b)(3) of the Federal Rules of Civil Procedure, subject to amendment and 7 additional discovery as follows: 8 9 a. Medical Monitoring Class: Individuals who consumed water from 10 their private wells in Yakima, Washington. ("Medical Monitoring 11 Class"). 12 13 b. Property Damage Class: Individuals who own real property in 14 Yakima, Washington. This class can be readily ascertained by Census 15 data, property records, and county records. 16 17 The Class has more than 100 members, as required under the Class 272. 18 Action Fairness Act, 28 U.S.C. § 1332(d). 19 Plaintiffs are members of the proposed Class they seek to represent. This 273. 20 21 action satisfies the numerosity, commonality, typicality, adequacy, predominance, and 22 superiority requirements of Federal Rule of Civil Procedure 23. 23 Excluded from the Class are: 24 25 a. Defendants, including any entity or division in which Defendants have a 26 controlling interest, along with their legal representative, employees,

1	officers, directors, assigns, heirs, successors, and wholly or partly owned		
2	subsidiaries or affiliates;		
3			
4	b. the Judge to whom this case is assigned, the Judge's staff, and the Judge's		
5	immediate family;		
6	c. any class counsel or their immediate family members; and		
7 8	d. all governmental entities.		
9	275. Plaintiffs reserve the right to amend the Class definition if discovery and		
10			
11	further investigation reveal that any Class should be expanded, divided into additional		
12	subclasses, or modified in any other way.		
13	A. Numerosity and Ascertainability		
14	276 TI: 4' 41 '4 ' 4 CE 1 D C' D 22( )(1)		
15	276. This action meets the numerosity requirement of Fed. R. Civ. P. 23(a)(1),		
16	given that the number of impacted individuals, upon information and belief, is in the		
17	hundreds, making individual joinder of Class Members' respective claims		
18			
19	impracticable. While the exact number of Class Members is not yet known, a precise		
20	number can be ascertained from Census data, property records, and county records and		
21	through other appropriate discovery.		
22	277. The resolution of the claims of the Class Members in a single action will		
23	277. The resolution of the claims of the Class Members in a single action will		
24	provide substantial benefits to all parties and the Court. It is expected that the Class		
25	Members will number in the hundreds.		
26			

278. Finally, Class Members can be notified of the pendency of this action by Court-approved notice methods.

### B. Typicality

- 279. Pursuant to Federal Rules of Civil Procedure 23(a)(3), Plaintiffs' claims are typical of the claims of class members and arise from the same course of conduct by Defendants. Plaintiffs' persons and real property, like all Class Members, have been damaged by Defendants' misconduct in that they have incurred damages and losses related to the introduction of PFOA, PFOS, and other PFC's into the water supplies in Yakima Washington, causing personal injuries and property damages.
- 280. Furthermore, the facts and circumstances surrounding Defendants' actions and misconduct are common to all Class Members and represent a common thread of misconduct resulting in common injury to all Class Members. The relief Plaintiffs seek is typical of the relief sought for absent Class Members.
- 281. While the degree of exposure may differ across Class Members, factual inconsistences between the class members are not enough to defeat typicality. Since the named Plaintiffs assert reflective of those of Class Members, the factor of typicality is satisfied.

## 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

23

24

25

26

### C. Adequacy of Representation

- 282. Plaintiffs will serve as fair and adequate class representative because their interests, as well as the interests of their counsel, do not conflict with the interests of other members of the class they seek to represent.
- 283. Plaintiffs have retained counsel competent and well experienced in class action and environmental tort litigation.
- 284. Plaintiffs and their counsel are committed to vigorously prosecuting this action on behalf of the Class and have the financial resources to do so. Neither Plaintiffs nor their counsel have interests adverse to the Class.

#### **D.** Predominance of Common Issues

- 285. There are numerous questions of law and fact common to Plaintiffs and Class Members that predominate over any question affecting only individual Class Members, making it appropriate to bring this action under Rule 23(b)(3). The answers to these common questions will advance resolution of the litigation as to all Class Members. Common legal and factual issues include:
- 286. Plaintiffs' claims arise from the same course of conduct giving rise to the claims of the Class Members, meaning the entire matter of Defendants' liability in this case can be adjudicated on a class basis to avoid a waste of judicial resources and inconsistent judgements.

1	287.	The answers to these common questions will advance resolution of the
2 3	litigation as	to all Class Members. Common legal and factual issues include:
4	a.	Whether Defendants engaged in the conduct alleged herein;
5	b.	Whether Defendants knew or should have known that exposure to PFOS,
6 7		PFOA, and/or their chemical precursors could increase health risks;
8	c.	Whether Defendants knew or should have known that their manufacture
9		of AFFF/Component Products containing PFOS, PFOA, and/or their
10		chemical precursors was unreasonably dangerous;
11		energe produced was united and general,
12	d.	Whether Defendants knew or should have known that their
13		AFFF/Component Products contained persistent, stable, and mobile
14		chemicals that were likely cause contamination;
15 16	e.	Whether Defendants failed to sufficiently warn users of the potential for
17		harm that resulted from use of their AFFF/Component Products;
18		narm that resulted from use of their ATTT/Component Froducts,
19	f.	Whether Defendants became aware of health and environmental harm
20		caused by their AFFF/Component Products containing PFOS, PFOA,
21		and/or their chemical precursors, and failed to warn users, Plaintiffs, and
22		
23		the Class Members;
24	g.	The extent to which Defendants knew about PFAS contamination in
25		Yakima, Washington;
26		

1	h.	Whether the Defendants owed Plaintiffs and the Class Members a duty to
2		refrain from the actions that caused the PFAS contamination in Yakima,
3		
4		Washington;
5	i.	Whether Defendants made unlawful and misleading representations or
6		material omissions with respect to the health impacts of PFAS;
7 8	j.	For the Medical Monitoring Class, whether Plaintiffs and Class Members
9		were exposed to water containing elevated levels of PFOA and PFOS
10		relaita living in Valvina. Washington.
11		while living in Yakima, Washington;
12	k.	For the Property Damage Class, whether the PFOA and PFOS
13		contamination caused and continues to cause:
14		(1) continuous invasion of the property rights of the Plaintiffs and
15		(1) continuous invasion of the property rights of the Flamith's and
16		Class such that the property values within the Areas of
17		Investigation have and/or continue to decline in value following
18		the disclosure of the PFOA contamination; and
19		
20		(2) Have substantially interfered with Plaintiffs' and the Class' use
21		and enjoyment of their property
22	1	Whathan Plaintiffs and the Class Mannhaus are antitled to democras and
23	1.	Whether Plaintiffs and the Class Members are entitled to damages and
24		other monetary relief and other equitable relief, including but not limited
25		to punitive damages, and if so, in what amount;
26		r r

1	l
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	

1 |

- m. Whether Plaintiffs and the Class Members have sustained damages and the proper measure of damages;
- n. Whether Defendants are strictly liable to Plaintiffs and the Class Members for their actions; and
- o. Whether Defendants were unjustly enriched by their actions at the expense of Plaintiffs and the Class Members.
- 288. While damages may vary amongst Class Members, individualized damages inquiries do not obviate the utility of the class mechanism for this action, given the predominant common issues of injury, causation, and liability.

## E. Superiority

289. The class action mechanism is superior to any other available means of the fair and efficient adjudication of this case. Further, no unusual difficulties are likely to be encountered in the management of this class action. Given the great number of private well owners in Yakima, Washington who were impacted by Defendants' AFFF/Component Products, it is impracticable for Plaintiffs and the Class Members to individually litigate their respective claims, as doing so would risk inconsistent judgments and the potential for increased delays and expense for the parties and the court system. Therefore, the class action mechanism presents considerably less management challenges and provides the efficiency of a single adjudication overseen by a single court.

1 VII. WASHINGTON PRODUCT LIABILITY ACT, MARKET SHARE LIABILITY, CONCERT OF ACTION, AND ENTERPRISE LIABILITY 2 3 This Class Action Complaint is brought pursuant to the WPLA, which "is 4 the exclusive remedy for product liability claims." Marcias v. Saberhagen Holdings, 5 *Inc.*, 175 Wn. 2d 402, 282 P.3d 1069, 1073 (2012). 6 7 291. Defendants in this action are manufacturers that control a substantial share 8 of the market for AFFF/Component Products containing PFOS, PFOA, and/or their 9 chemical precursors in the United States and are jointly responsible for the 10 11 contamination of the groundwater at Yakima, Washington. Market share liability 12 attaches to all Defendants and the liability of each should be assigned according to its 13 percentage of the market for AFFF/Component Products at issue in this Complaint. 14 15 292. Because PFAS is fungible, it is impossible to identify the exact Defendant 16 who manufactured any given AFFF/Component Product containing PFOS, PFOA, 17 and/or their chemical precursors found free in the air, soil or groundwater, and each of 18 19 these Defendants participated in a territory-wide and U.S. national market for 20 AFFF/Component Products during the relevant time. 21 293. Concert of action liability attaches to all Defendants, each of which 22 23 participated in a common plan to commit the torts alleged herein and each of which 24 acted tortuously in pursuance of the common plan to knowingly manufacture and sell 25 26

1	inherently dangerous AFFF/Component Products containing PFOS, PFOA, and/or
2 3	their chemical precursors.
4	294. Enterprise liability attaches to all the named Defendants for casting
5	defective products into the stream of commerce.
6	VIII. CAUSES OF ACTION
7 8	COUNT I:
9	DEFECTIVE DESIGN
10	295. Plaintiffs adopt, reallege, and incorporate the allegations above and
11	further allege the following:
12	296. As manufacturers of AFFF/Component Products containing PFOS,
13	
14	PFOA, and/or their chemical precursors, Defendants owed a duty to all persons whom
15	its products might foreseeably harm, including Plaintiffs, and not to market any product
16 17	which is unreasonably dangerous in design for its reasonably anticipated use.
18	297. Defendants' AFFF/Component Products were unreasonably dangerous
19	for its reasonably anticipated uses for the following reasons:
20	a. PFAS causes extensive groundwater contamination, even when used in
21	an 11112 summer of ground was sometimen, even when upon in
22	its foreseeable and intended manner;
23	b. Even at extremely low levels, PFAS render drinking water unfit for
24	consumption;
25	
26	c. PFAS poses significant threats to public health; and

1	monitoring costs and have suffered and will suffer personal injuries and property
2 3	damages due to the PFAS contamination at their water wells.
4	304. Defendants knew that it was substantially certain that their acts and
5	omissions described above would result in the contamination of Plaintiffs and Class
6 7	Members' water wells, and the personal injuries they sustain. Defendants committed
8	each of the above-described acts and omissions knowingly, willfully, and/or with fraud,
9	oppression, or malice, and with conscious and/or reckless disregard for Plaintiffs'
10 11	health and safety, and/or property rights.
12 13	COUNT II: FAILURE TO WARN
14	305. Plaintiffs adopt, reallege, and incorporate the allegations above, and
15	further allege the following:
16 17	306. As manufacturers of AFFF/Component Products containing PFOS,
18	PFOA, and/or their chemical precursors, Defendants had a duty to provide adequate
19	warnings of the risks of these products to all persons whom its product might
20 21	foreseeably harm, including Plaintiffs and the public.
22	307. Defendants' AFFF/Component Products were unreasonably dangerous
23	for its reasonably anticipated uses for the following reasons:
24 25	a. PFAS causes extensive groundwater contamination, even when used in
26	its foreseeable and intended manner:

- b. Even at extremely low levels, PFAS render drinking water unfit for consumption;
- c. PFAS poses significant threats to public health; and
- d. PFAS create real and potential environmental damage.
- 308. Defendants knew of the health and environmental risks associated with their AFFF/Component Products, and failed to provide a warning that would lead an ordinary reasonable user or handler of a product to contemplate the dangers associated with their products or an instruction that would have avoided Plaintiffs' injuries.
- 309. Despite Defendants' knowledge of the environmental and human health hazards associated with the use and/or disposal of their AFFF/Component Products in the vicinity of drinking water supplies, including PFAS contamination of public drinking supplies and private wells, Defendants failed to issue any warnings, instructions, recalls, or advice regarding their AFFF/Component Products to Plaintiffs, governmental agencies or the public.
- 310. As a direct and proximate result of Defendants' failure to warn, Plaintiffs have incurred and will incur medical monitoring costs and have suffered and will suffer personal injuries and property damages in connection to the PFAS contamination at their water wells.
- 311. Defendants knew that it was substantially certain that their acts and omissions described above would result in the contamination of Plaintiffs' water wells.

Defendants committed each of the above-described acts and omissions knowingly, 2 willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless 3 disregard for Plaintiffs' health and safety, and/or property rights. 4 5 **COUNT III: NEGLIGENCE** 6 7 Plaintiffs adopt, reallege, and incorporate the allegations above, and 312. 8 further allege the following: 9 313. As manufacturers of AFFF/Component Products containing PFOS, 10 11 PFOA, and/or their chemical precursors, Defendants owed a duty to Plaintiff and to all 12 persons whom its products might foreseeably harm and to exercise due care in the 13 formulation, manufacture, sale, labeling, warning, and use of PFAS-containing AFFF. 14 15 314. Defendants owed a duty to Plaintiff to act reasonably and not place 16 inherently dangerous AFFF/Component Products into the marketplace when its release 17 into the air, soil, and water was imminent and certain. 18 19 Defendants knew or should have known that PFAS were leaching from 20 AFFF used for fire protection, training, and response activities. 21 316. Defendants knew or should have known that PFAS are highly soluble in 22 23 water, highly mobile, extremely persistent in the environment, and high likely to 24 contaminate water supplies if released into the environment. 25 26

1	317. Defendants knew or should have known that the manner in which they
2	were designing, manufacturing, marketing, distributing, and selling their
3 4	AFFF/Component Products would result in in the contamination of Plaintiffs water
5	wells.
6	
7	318. Despite the fact that Defendants knew or should have known that PFAS
8	are toxic, can contaminate water resources and are carcinogenic, Defendants
9	negligently:
10	a. designed, manufactured, formulated, handled, labeled, instructed,
11	
12	controlled, marketed, promoted, and/or sold AFFF/Component Products
13	containing PFOS, PFOA, and/or their chemical precursors;
14 15	b. issued deficient instructions on how their AFFF/Component Products
16	should be used and disposed of, thereby permitting PFAS to contaminate
17	the groundwater in and around Yakima County;
18	
19	c. failed to recall and/or warn the users of their AFFF/Component Products
20	of the dangers of groundwater contamination as a result of standard use
21	and disposal of their products;
22	
23	d. failed and refused to issue the appropriate warning and/or recalls to the
24	users of their AFFF/Component Products; and
25	e. failing to take reasonable, adequate, and sufficient steps or actions to
26	eliminate, correct, or remedy any contamination after it occurred.

1	319. The magnitude of the burden on the Defendants to guard against this
2 3	foreseeable harm to Plaintiff was minimal, as the practical consequences of placing this
4	burden on the Defendants amounted to a burden to provide adequate instructions,
5	proper labeling, and sufficient warnings about their AFFF/Component Products.
6 7	320. As manufacturers, Defendants were in the best position to provide
8	adequate instructions, proper labeling, and sufficient warnings about their
9	AFFF/Component Products, and to take steps to eliminate, correct, or remedy any
10	contamination they caused.
11	
12	321. As a direct and proximate result of Defendants' negligence, Plaintiffs
13	have incurred and will incur medical monitoring costs and have suffered and will suffer
14 15	personal injuries and property damages due to the PFAS contamination at their water
16	wells.
17	322. Defendants acted without reasonable care. They knew or should have
18	
19	known that their acts and omissions described above would enter Plaintiffs' water wells
20	and caused the personal injuries.
21	COUNT IV:
22	TRESPASS
23	323. Plaintiff adopts, realleges, and incorporates the allegations above, and
24	
25	further allege the following:
26	

1	324. Plaintiffs are the owners, operators, and actual possessors of real property
2 3	and improvements used for collecting drinking water.
4	325. Defendants designed, manufactured, distributed, marketed, and sold
5	AFFF/Component Products with the actual knowledge and/or substantial certainty that
6	AFFF containing PFOS, PFOA, and/or their chemical precursors would, through
8	normal use, release PFAS that would migrate into groundwater, causing contamination
9	on property other than on the property where it was used.
10 11	326. Defendants intended or knew that it was substantially certain that their
12	acts and omissions described above would threaten public health and cause extensive
13	contamination of property, including groundwater collected for drinking.
14 15	327. Plaintiffs have incurred and will incur incurred medical monitoring costs
16	and have suffered and will suffer personal injuries and property damages due to the
17	PFAS contamination at their water wells.
18 19	328. Plaintiffs are seeking treble damages and actual litigation costs from
20	Defendants as a result of their trespass. See RCW 4.24.630.
21 22	COUNT V: PRIVATE NUISANCE
23	329. Plaintiff adopts, realleges, and incorporates the allegations above, and
<ul><li>24</li><li>25</li></ul>	further allege the following:
26	
l	

Tel. (206) 264-8600

- 335. The improper use, handling, storage, release, discharge or dispose of Defendants' AFFF/Component Products has contaminated the environment, soil, property, natural resources, and drinking water supplies surrounding YTC, including Plaintiffs' and the Class's properties, unreasonably interfering with the Plaintiffs' and the Class's use of their properties, thus causing a private nuisance.
- 336. The introduction of unknown quantities of PFAS into private wells unreasonably interfered with the use of natural resources and drinking water supplies in the areas surrounding YTC, such that it is offensive and has caused significant inconvenience or annoyance.
- 337. The potential health hazards from the drinking water have caused Plaintiffs significant inconvenience and expense, interfering with the use of natural resources and drinking water supplies in the areas surrounding YTC.
- 338. As a direct and proximate result of Defendants' acts and omissions creating the above-described nuisance, Plaintiffs have suffered and continue to suffer damages in responding to the PFAS contamination to the private water supplies in the areas surrounding YTC, including but not limited to the costs expended on alternative sources of drinking water for residents whose private wells have been contaminated, public water main extensions, investigative costs, engineering costs, sampling, monitoring and remediation costs, medical monitoring costs, and medical treatment costs.

1	339. Defendants intended or knew that it was substantially certain that their	
2 3	acts and omissions described above would threaten public health and cause extensive	
4	contamination of property, including groundwater collected for drinking.	
5 6	COUNT VI: ACTUAL FRAUDULENT TRANSFER (DuPont and Chemours Co.)	
7	340. Plaintiffs adopt, reallege, and incorporate the allegations above, and	
8 9	further allege the following:	
10	341. Through their effectuation of the Spinoff, Chemours Co. and DuPont (the	
11	"Fraudulent Transfer Defendants") caused Chemours Co. to transfer valuable assets to	
12 13	DuPont, including but not limited to the \$3.9 billion dividend (the "Transfers"), while	
14	simultaneously assuming significant liabilities (the "Assumed Liabilities").	
15	342. The Transfers and Assumed Liabilities were made for the benefit of	
16 17	DuPont.	
18	343. At the time that the Transfers were made and the Liabilities were assumed,	
19	and until the Spinoff was complete, DuPont was in a position to, and in fact did, control	
<ul><li>20</li><li>21</li></ul>	and dominate Chemours Co.	
22	344. The Fraudulent Transfer Defendants made the Transfers and incurred the	
23	Assumed Liabilities with the actual intent to hinder, delay, and defraud the creditors or	
<ul><li>24</li><li>25</li><li>26</li></ul>	future creditors of Chemours Co.	

1	345.	Plaintiffs have been harmed and will be harmed as a result of the conduct	
2	of the Fraudulent Transfer Defendants.		
3	of the Francisco Defendants.		
4	346.	Plaintiffs are entitled to avoid the Transfers and to recover property or	
5	value transfe	erred to DuPont.	
6	COUNT VII:		
7	CONSTRUCTIVE FRAUDULENT TRANSFER (DuPont and Chemours Co.)		
8	347	Plaintiffs adopt, reallege, and incorporate the allegations above, and	
9			
10	further alleg	ge the following:	
11	348.	Chemours Co. did not receive reasonably equivalent value from DuPont	
12			
13	in exchange for the Transfers and Assumed Liabilities.		
14	349.	Each of the Transfers and the assumption of the Assumed Liabilities by	
15	Chemours C	Co. was made to or for the benefit of DuPont.	
16	350	At the time that the Transfers were made and the Assumed Liabilities	
17	330.	At the time that the Transfers were made and the Assumed Liabilities	
18	were assume	ed, and until the Spinoff was complete, DuPont was in a position to, and in	
19	fact did, con	atrol and dominate Chemours Co.	
20	251	Th. F 1.1 4 T f D. f 1 4 1. 4 T 1 1	
21	351.	The Fraudulent Transfer Defendants made the Transfers and assumed the	
22	Assumed Liabilities when Chemours Co. was engaged or about to be engaged in a		
23	business for which its remaining assets were unreasonably small in relation to its		
24			
25	business.		
26			

1	352.	Chemours Co. was insolvent or in contemplation of insolvency at the time
2 3	of the Transfers, or became insolvent as a result of the Transfers and its assumption o	
4	the Assumed Liabilities.	
5	353.	At the time that the Transfers were made and Chemours Co. assumed the
6 7	Assumed Li	iabilities, the Fraudulent Transfer Defendants intended to incur, or believed
8	or reasonably should have believed, that Chemours Co. would incur debts beyond its	
9	ability to pay as they became due.	
10 11	354.	Plaintiff have been harmed and will be harmed as a result of the Transfers.
12	355.	Plaintiffs are entitled to avoid the Transfers and to recover property or
13	value transferred to DuPont.	
	COUNT VIII.	
14		COUNT VIII:
15		COUNT VIII: MEDICAL MONITORING
	356.	
15 16		MEDICAL MONITORING
15 16 17 18	further alleg	MEDICAL MONITORING  Plaintiffs adopt, reallege, and incorporate the allegations above, and
15 16 17	further alleg 357.	MEDICAL MONITORING  Plaintiffs adopt, reallege, and incorporate the allegations above, and ge the following:
15 16 17 18 19 20	further alleg 357. some of wh	MEDICAL MONITORING  Plaintiffs adopt, reallege, and incorporate the allegations above, and ge the following:  Medical monitoring is available to Plaintiffs and the Class Members,
15 16 17 18 19 20 21 22 23	further alleg 357. some of wh because the	MEDICAL MONITORING  Plaintiffs adopt, reallege, and incorporate the allegations above, and ge the following:  Medical monitoring is available to Plaintiffs and the Class Members, nom have yet to sustain a present injury as a stand-alone cause of action,
15 16 17 18 19 20 21 22	further alleg 357. some of wh because the	MEDICAL MONITORING  Plaintiffs adopt, reallege, and incorporate the allegations above, and ge the following:  Medical monitoring is available to Plaintiffs and the Class Members, nom have yet to sustain a present injury as a stand-alone cause of action, increased risk of developing the diseases and conditions discussed herein

1	of the contaminants released by Defendants' AFFF/Component Products, including but	
2 3	not limited to PFOS, PFOA, and/or their chemical precursors.	
4	359. Defendants knew or should have known that exposure to PFAS was	
5	hazardous to human health.	
6 7	360. Defendants knew or should have known that the manner in which they	
8	were manufacturing, marketing, and selling their AFFF/Component Products	
9	containing PFOS, PFOA, and/or their chemical precursors would result in Plaintiffs	
10	and the Class Members being exposed to increased levels of PFAS.	
11		
12	361. Defendants continued negligent acts and omissions in manufacturing,	
13	marketing, and selling their AFFF/Component Products were the proximate cause of	
14 15	excessive exposure to PFAS on behalf of Plaintiffs and the Class Members.	
16	362. The resulting exposure significantly increased the risk of Plaintiffs and	
17	the Class Members contracting serious health conditions, including but not limited to	
18 19	kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy induced	
20	hypertension (including preeclampsia), hypercholesterolemia, and autoimmune	
21	diseases such as sarcoidosis.	
22		
23	363. Plaintiffs have also experienced fear and anxiety as a result of their	
24	increased risk of contracting the aforementioned conditions, including but not limited	
<ul><li>25</li><li>26</li></ul>	to kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy	

induced hypertension (including preeclampsia), hypercholesterolemia, and 2 autoimmune diseases such as sarcoidosis. 3 The significantly increased health risks associated with exposure to 4 5 PFOS, PFOA, and/or their chemical precursors make periodic diagnostic medical 6 examinations reasonable and necessary. 365. Plaintiffs and the Class Members have incurred expenses and will incur 8 9 future expenses for medical monitoring and, as a result, seek payment of their related 10 medical expenses as an element of the damages they are entitled to from Defendants. 11 366. To compensate Plaintiffs and the Class Members for damages suffered 12 13 due to Defendants' acts, they require, among other things, that Defendants collectively 14 pay the past and future costs of obtaining necessary medical care, toxicological 15 examinations and diagnoses, and any other medical monitoring necessary to ascertain 16 17 and treat any current or future injuries suffered as a result of their exposure to PFAS, 18 with Plaintiffs and the Class Members retaining the freedom to choose their medical 19 providers. Many of these costs would not be covered by health care insurers, and if 20 21 covered, may unfairly result in increased premiums. 22 The increased susceptibility to certain injuries and irreparable threat to 23 future health and well-being Plaintiffs and the Class Members face as a result of their 24 25 exposure to increased levels of PFAS can only be mitigated and/or addressed by the 26

Tel. (206) 264-8600

creation of a medical monitoring program (the "Monitoring Program") that includes 2 but is not limited to: 3 a. Establishing a program that provides education and outreach on the 4 5 existence and availability of the services established under the Monitoring 6 Program, including but not limited to the establishment of a public website 7 with information about the Monitoring Program, meetings with 8 9 potentially eligible members, development and dissemination of outreach 10 materials informing Yakima residents about the program, and the 11 establishment of phone information services; 12 13 b. Funding additional studies of the long-term effects of exposure to PFOS, 14 PFOA, and/or their chemical precursors; 15 c. Funding medical surveillance for Yakima residents who receive or 16 17 received their water from a private well; 18 d. Funding research into possible treatments for the detrimental effects of 19 PFAS exposure suffered by Plaintiffs' and the Monitoring Class 20 21 Members' as a result of the acts and omissions alleged here; 22 e. Gathering and forwarding to the treating physician of Plaintiffs and each 23 Monitoring Class Member information related to the diagnosis and 24 25 treatment of injuries resulting from their exposure to PFAS; and 26

1	374. Establishment of the Monitoring Program is an essential part of the	
2 3	consequential damages for Plaintiffs' and the Monitoring Class Members' exposure to	
4	PFAS because without said program, they will be subjected to additional injury and/or	
5	injury progression.	
6	375. Plaintiffs request that the Court appoint a plan administrator, require the	
7 8	Defendants to fund the medical monitoring plan, and reserve jurisdiction to enforce the	
9	terms and conditions of the Monitoring Program.	
10		
11	376. Accordingly, Plaintiffs and the Medical Monitoring Class Members are	
12	entitled to a medical monitoring program that provides for medical testing,	
13	surveillance, monitoring, and study of Plaintiffs and the Medical Monitoring Class	
14 15	Members for conditions associated with exposure to the contaminants described herein,	
16	as well as payment of their attorney's fees and expenses, and any other relief this court	
17	deems just and proper.	
18	PRAYER FOR RELIEF	
19		
20	WHEREFORE, Plaintiffs, individually and on behalf of all others similarly	
21	situated, demands judgment against Defendants, and each of them, jointly and	
<ul><li>22</li><li>23</li></ul>	severally, and request the following relief from the Court:	
24	a. Certification of the proposed Class;	
25	b. an award to Plaintiffs and the Class Members of general, compensatory,	
26	avamplem, consequential and naminal democracy	
	exemplary, consequential, and nominal damages;	

1	c. equitable or injunctive relief, including, but not limited to, an order	
2	requiring that Defendants:	
3		
4	i. establish and implement a medical monitoring program for	
5	Plaintiffs and the Class Members; and	
6	ii. an order requiring that Defendants fund a trust that will cover a	
7 8	prospective medical monitoring program.	
9	d commonsators domesas according to much including but not limited to	
10	d. compensatory damages according to proof including, but not limited to:	
11	i. costs and expenses related to the past, present, and future	
12	investigation, sampling, testing, and assessment of the extent of	
13	PFAS contamination at Yakima County;	
14		
15	ii. costs and expenses related to past, present, and future treatment	
16	and remediation of PFAS contamination at Yakima County; and	
17	iii. costs and expenses related to past, present, and future	
18		
19	installation and maintenance of filtration systems to assess and	
20	evaluate PFAS at Yakima County; and	
21	iv. costs and expenses related to funding and development of a	
22	iv. costs and expenses related to funding and development of a	
23	medical monitoring program on behalf of Plaintiffs and the	
24	Class.	
25		
26	e. an order barring the transfer of DuPont's liabilities for the claims brought	
'	in this Complaint;	

1	f. an award of punitive damages in ar	amount sufficient to deter Defendants'
2 3	similar wrongful conduct in the future;	
4	g. an award of consequential damages;	
5	h. an order for an award of attorney fees and costs, as provided by law;	
6 7	i. an award of pre-judgment and post-judgment interest as provided by law;	
8	1	
9	j. all older for all such other tener th	e Court deems just and proper.
10 11	DEMAND FOR JURY TRIAL	
12	Plaintiffs demand a trial by jury of all issues so triable as a matter of right.	
13	Dated this 17th day of May, 2023.	
14 15	Resr	pectfully submitted,
16 17	RRICKLIN & NEWMAN, LLP NAI	POLI SHKOLNIK
18 19 20	Dave Bricklin, WSBA No. 7583. Patri Zachary Griefen, WSBA No. 48608 360 123 NW 36th Street New	ck Lanciotti, Esq. (PHV Pending) Lexington Avenue, 11th Fl. York, New York 10017
21	Suite 205 (212) 397-1000 Seattle, WA 98107 planciotti@napolilaw.com	
22 23	206.264.8600 bricklin@bnd-law.com griefen@bnd-law.com	
24	gricicii (a) oliu-law .com	
25	5	
26	6	